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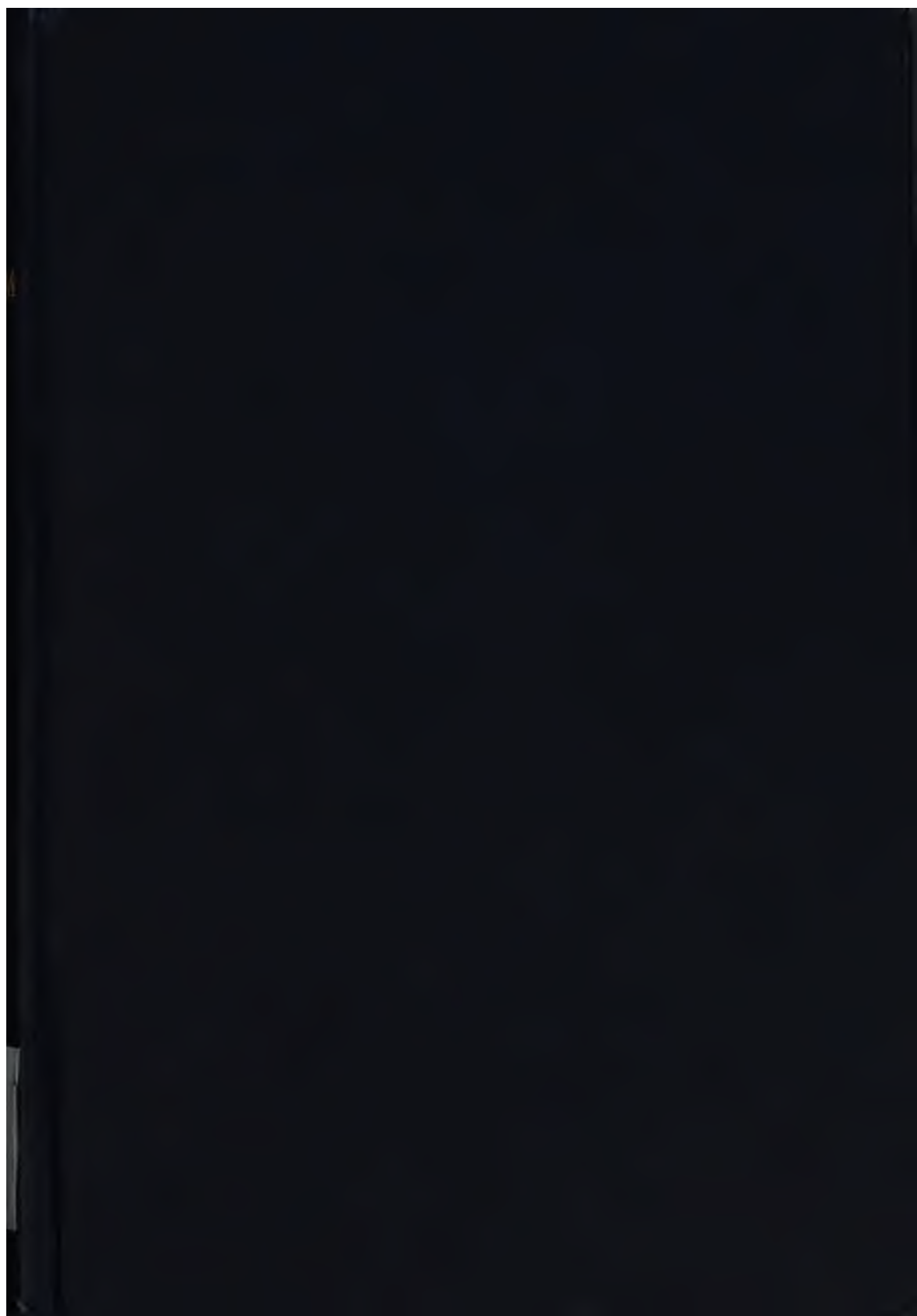
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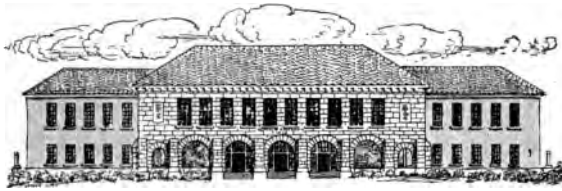
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My dear Cubberly:-

This book is simply maddening. ^{It} ~~has~~ has some awfully good material, but ^{it} ~~the~~ doesn't know how to handle it. The man's brain must be ~~stupid~~ "woozy". He goes backward and forward so that I never could tell whether he is speaking about Harvard, or Yale, or Pennsylvania. A pretty fair illustration of the way his material is gathered may be found on pp. 185-6.



**THE COLLEGE CURRICULUM IN THE
UNITED STATES**

THE
COLLEGE CURRICULUM

IN THE
UNITED STATES

BY
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FORMERLY
Dean, Women's College, Brown University
AND
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PREFACE

IN making public the results of this study of the development of the college curriculum I wish to acknowledge the extreme courtesy of the authorities of Harvard, Yale, Princeton, University of Pennsylvania, Columbia and Brown in facilitating the research. The cordiality with which the treasured manuscript records were opened to my inspection and the friendly suggestions and appreciative interest in the work on the part of the custodians of the archives did much to lighten the burden of the task.

To Commissioner W. T. Harris and Mr. H. C. Putnam, Librarian of Congress, who provided valuable data from college catalogues not elsewhere available, I desire to render acknowledgment. To Dean James E. Russell, to Professor Gonzales Lodge, and to Professor Paul Monroe, under whose supervision the work was conducted, and to President Nicholas Murray Butler, who suggested the theme, am I grateful for the privileges the investigation afforded.

CONTENTS

CHAPTER I

	PAGE
INTRODUCTORY	II

CHAPTER II

THE FIVE FORMAL DOCUMENTS

The Three Periods	20
Derivation of Ideals	20
Breaking of the bond	21
The Dunster manuscript	22
The first program of study	31
The manuscript of 1690	32
Yale in 1713	33
President Wadsworth's diary	34
"Orders and appointment to be observed in ye Collegiate training."	35
Princeton's beginnings	38
Reflections of the scientific activities in England	39
The prize for culture	40
The scheme of study	41
Increase in system	42
The Yale confession of Faith	44
The importance of Divinity	47
Harvard in 1759	48
The tutorial system	49
Broader lines	51
Establishment at Yale of a Professorship of Mathematics and Philo- sophy, 1771	53
Position of Science, Mathematics, English and the modern languages.	54
The efficiency of the method	54
Final statement of the original scheme	54

CHAPTER III

THE NEW TENDENCY

Kings College, 1754	56
The advertisement in the New York Gazette	57
Laws and Orders of 1755	58
The variety of training of Kings Professors	59
The ideal of the founders	59

	PAGE
The pamphlet called "The College of Mirania."	60
Analysis of this document	61
Its place in our educational history	65
Its author, the first Provost of Pennsylvania	66
His adaptation of the plan as outlined in the pamphlet for use of the College in Philadelphia	67
Comparison with the Princeton Program and with the Scotch revision of the course of study in 1753	72
Its relation to the reforms at William and Mary in 1779	73
Thomas Jefferson and the University of Virginia	74
Close of the Colonial Period	76

CHAPTER IV

GROWTH AND DEVELOPMENT

The influence of the Revolutionary War	78
The decline of divinity and the rise of modern languages and history.	79
President Stiles of Yale	79
His diary	80
The "revision" at Harvard in 1787	82
Dr. Waterhouse Lectures in Astronomy and Philosophy	82
The text-books required from "rusticated" students	88
Text-books in use at Yale during the 18th century	90
The reorganization of Kings	92
Its liberal and comprehensive program	93
Its close approach to Dr. Smith's ideal	94
The pamphlet of 1792	96
The report of 1810	97
The persistency of the ideal of "development" in the college	101
The traditions elsewhere	108
Brown University and its relation to Princeton	108
Laws of 1783	109
The backwardness of its mathematical development	110
Laws of 1803	111
History at Brown and at Harvard	112
Divinity and the Classics at Princeton	113
The advice of President Samuel S. Smith	113
An interesting correspondence	115
Pamphlet of 1803	118
Brown University in 1827	122
Divergence of Brown from Princeton	123
Growth of Harvard and Yale	123
The adoption of the program of Rev. William Smith	123
The segregation of departments	124
The text-book question	124
President Wayland's Report at Brown	124
Equipment of gymnasium	125

CONTENTS

9

	PAGE
Restrictions and rigidity	126
Catalogues of Harvard, 1825	126
Yale, 1824	128
Decline of Pennsylvania	129
Rules and statutes of 1811, 1817, 1820	135
The change of ideal	141
The importance of "wholesome discipline."	141
A faculty for "government and instruction."	141
The growth of uniformity and drill	142
Pamphlet published in New Haven, 1828	143
Its widespread effect	144
A new definition of the curriculum	145

CHAPTER V

OTHER IDEALS

Two reports of the Faculty of Amherst College, 1827	155
— A chair of the Science of Education urged	156
Union College, 1802	157
University of Vermont	158
A period of experiment and discussion	160
President Wayland of Brown	161
The return of American students from Germany	161
✓ The growth of co-operation	161
✓ <i>Lehr and Lern freiheit</i>	162
German influence	162
The Spirit of the Age and the inauguration of Josiah Quincy as President of Harvard	163
The conservative view	163
President Noah Porter of Yale	163
The radical statement of Charles Francis Adams	164
The permanence of the ideal of President Quincy	165
Cornell, 1867	165
The reform of the curriculum at Harvard in 1869	170

CHAPTER VI

MODERN REFORM

Since 1870	171
Definement of aim	171
Change merely one of equipment and method	171
Laboratory system	171
Source of reform	171
"Seminars."	172
The opening of libraries, gymnastics	172
Liberalization and equalization of studies	173
The discovery of the individual	174

	PAGE
The cultural ideal	174
The elective system	175
The practical worth of the academic course	175
Special Schools of Science	175
The place of the classics in the modern curriculum	176
Specialization	178
The tendency to shorten or abridge the course	179
Abolishment of "classes."	180
The commercial value of the degree	180
The change of method in English literature, language and rhetoric . .	181
The revival of Forensics	182
Growth of history and the allied subjects	182
Evolution of subject matter	183
Worthfulness of the college course	183
What is now meant by a college education	183
Definition	183
Bibliography	184
Vita	187

CHAPTER I

INTRODUCTORY

THE collegiate curriculum in the United States is a growth and not an accident. Its genesis is to be found, as is that of many other of our institutions, in the older world, whence our ancestors came. The earlier forms of its establishment here follow closely the European prototype. But as time elapses, circumstances change, needs increase, and demands upon it multiply, the pristine simplicity of the original is altered, and the present product astonishes by the complexity of its diversity and the variety of its detail. Yet, from the earliest to the latest record of the course of study in our colleges, an unbroken chain of development can be traced, a logical sequence of events can be established, and the causes that led to the inevitable consequence can be clearly shown. It is even possible to push the inquiry one step farther and to discover whence the inspiration was first derived; to trace the educational ideals, that now govern and that have governed our collegiate instruction, back to their source and to reveal the vitality of the union that exists between the higher education here to-day and the higher education of past times.

That this phase of college life has been heretofore neglected is a trifle surprising. Even so soon as collegiate instruction began, the reporter and the historian seem to have made it their particular business to concern themselves with many minor details of the management of the enterprises. We have full accounts of lotteries conducted for their support. The gifts and donations from interested people are carefully spread upon the records. The cost of new buildings and the ceremonies of dedications and commencements, with the attending riots and disturbances, are set forth in elaborate terms, but

the real work of the college—the lectures given, the recitations heard, the text-books used—has been either wholly neglected or is mentioned in such brief fashion as to give but a vague idea of what was the actual condition of things scholastic.

While we might naturally expect that something very like the actual state of things might exist in the earliest times, before the country was organized, still it would seem reasonable that, when accounts began to be regularly kept, the record of the course of study in the colleges would become a public care. But the historians of the colleges refrain from giving much information, that has lain directly at their hands, and have passed on to the more striking fields of architecture, or of finance, or to the eulogy of some favorite professor or remarkable president. Interesting as are these tributes to scholarly worth, they uniformly fall short of the accurate information desired, and we search their pages vainly to find, in brief, an account of classroom methods or scholastic discipline of a given period. The only sources from which to study the collegiate curriculum in the United States, are the private records of the Trustees and the Faculties of the various colleges, so far as they have been preserved, supplemented by the catalogues of the institutions, "laws and statutes," and "rules for the government," printed reports of committees of one body or the other, and such diaries and memoirs as singular students have sometimes occupied their seemingly abundant leisure in compiling. It is from documents of this character that the data contained in the following chapters have been secured.

The conclusions reached, from a study of these documents, divide themselves into two classes: conclusions that relate to the effect of the college course upon the community; and secondly, and conversely, the effect of the community upon the college course. In the one case we are led directly to an examination of the schedules and plans of recitations and lectures of the various institutions; in the other, to a consideration of the environment in which the institutions have been placed, and to a review of the criticisms, direct or indirect, to which they have been exposed. These two forces in action and

reaction, show a result to-day in the courses of study as at present authorized, and, by their interplay of strength, have molded and fashioned into a distinct type of the higher education, the curriculum for the college in the United States.

Placed midway between the secondary school and a professional or a public life, the college in the United States has been effectually prevented from becoming a cloister. Its relations to the public life have been too close and too vital for it to withdraw itself from the concerns of general existence, and its sensitiveness to criticism has clearly manifested that it has well recognized its peculiar mission to train citizens for service in a free and independent state. Its course of study has been molded to attain this result. The changes in the methods employed have all of them looked toward greater facility for accomplishing this end. The variety that individual idiosyncrasy of circumstance has sometimes dictated to certain institutions, has only emphasized the fundamental idea. The constantly increasing tendency to introduce subjects that shall be practical and definite in their application, is direct in its bearing on this purpose. With remarkable uniformity the institutions involved have accepted this idea. With unity of aim has come uniformity of method. Inspection of catalogues shows that in the amount of work required, previous to receiving the first degree in arts, there is a singular agreement between colleges geographically widely separated. Uniformity of entrance conditions is already almost an accomplished fact. And, with the centralization of the graduate work of the country, that is now (1902) rendered possible by the incorporation of the Carnegie Institution, there should come to the college a definite limitation of its field of usefulness that should make for sound learning in its peculiar domain.

The necessity of limiting the work of the college has arisen only in later times as subjects have pressed for entrance upon its formerly meagre curriculum. In general, it may be said that admission is now denied to no subject whose qualifications for entrance satisfy the demands of culture in its broad and liberal sense. It is the ideal of the college that its graduates

be prepared for citizenship by their course of study within its walls, in a way most fully to develop their best powers of mind and establish their characters on the basis of integrity and truth. For each institution the problem has presented different phases. It is in this particular that the influence of the community upon the college has been felt. The ideals of the community have become the ideals of the college, and that college has done its most perfect work whose sympathy with the community has been most vital and close. Passing from the local to the wider environment, it will be seen that that college becomes most truly national which reflects and reproduces, in its curriculum, the national ideal.

But this nationalization of education has been of slow growth. It can hardly yet be said to be thoroughly comprehended. A long way toward it was attained, in 1892, when the Report of the Committee of Ten was published, which revealed the importance of the larger outlook. The unity that makes strength was advanced, and many of the barriers of provincial prejudice and sectarian conceit were done away. These barriers and this conceit were detrimental to education as well as to a true national unity, and date in education, as in politics, from the Colonial period of our history. Possibly they have been fastened longer in our colleges than in any other walks of life, because of the segregation that accompanies the college career. In their best form they develop into intense loyalty to the special college peculiar to alumni. In their worst, they are exhibited in a narrow intolerance of practices and methods of education differing from those in vogue in the special institution. Fortunately this phase of controversy seldom now finds expression in the public prints nor on the public stage. The catholicity of the college course is well nigh established. College boards of officers realize they are all working towards a grand common end, and that petty squabbles over methods and devices are too much beneath their dignity to receive attention.

Yet the road to this calm and equable freedom is strewn with many pamphlets of truly vitriolic quality. Around no



points did they accumulate in greater number nor with greater strength of utterance than at the final stage of the movement toward liberty of election, and during the early debate aroused by the suggested removal of Greek from the required course of study. The period may be roughly indicated by the year 1870, for while one movement antedated this exact twelvemonth by some years, and the latter is still a living issue in educational circles, this time marks the launching of the largest experiment in college education that this country has witnessed and is the true beginning of the modern period.

If imitation is the sincerest flattery, the advocates of the reforms instituted in the colleges about 1870, must be gratified by the manner in which there has been so general an acceptance of their most important suggestions. That these ideas met with the cordial approbation of the clearest thinkers at that time was due to the intrinsic excellence of the notions formulated and to the restricted scheme of studies that then occupied the students' attention. This scheme had come down from the Revolutionary era, and, in theory, had remained practically unchanged since its original promulgation. In theory it was a well-proportioned scheme of study. But in practice its symmetry had been lost. What was meant as a comprehensive equipment for life had degenerated, as Francis Wayland points out, into a routine of required study which, based on textbooks, left but little for the professor to accomplish save the infantile hearing of the lesson, and afforded the student no mental growth and but little intellectual activity. Here and there an individual professor broke away from the established system, or a bright pupil carried the professor beyond the narrow confines of the prescribed curriculum, but the general tone of intellectual life in the colleges in the early nineteenth century was low and tame. Nothing seemed to thrive save as the individual genius of some educator lifted his favorite subject into momentary prominence.

Especially was this true of the classical departments which for a long time exercised a peculiar dominance over college affairs. In the original scheme of a course of study for an

having
 American college, the position of the classics in the curriculum appears to have been gauged in its proper proportion. The wonder is that these subjects should have succeeded in bursting the trammels of restraint and overburdening the course of study at the expense of their fellows. Their power arose, doubtless, because they proceeded from a well-organized base. The preparatory course was definite and clear. The other subjects in the list were somewhat vaguely understood, and except in the case of mathematics, really required elaborate machinery for their complete elucidation. We notice with something akin to awe, the reverent way in which the "philosophical apparatus" is spoken of, and at the beginning of the century the possession of the "orrery" constructed by David Rittenhouse seems to have lifted one of our colleges, at a single bound, into a position of jealous distinction. Yet, later, this same institution (Princeton), proudly boasts of its "golden succession" of classical professors as if by the efficiency and scholarship of the departments of Latin and Greek alone was to be judged the true worth of the college as an educational force. Certainly, we owe the classics a debt we can hardly repay, for the valuable conservative influence they exerted upon our immature curriculum. At a time when the wells of poetry and art, along other lines, were closed, or had not yet been opened, they provided reservoirs of culture and refinement of taste. The whole career of Latin and Greek, their rise into unexampled prominence, and the strength with which they resisted encroachments on their prerogative, coupled with their alliance with the other established subjects to prevent the opening of the curriculum to new sciences and languages, forms an interesting chapter of our college annals. The protracted dominance of these subjects is difficult to explain unless we take into consideration the wonderful effect produced upon the scholarship of this post-Revolutionary period by the publication in 1828, in Vol. XV. of the American Journal of Science, of a certain formal report by a college faculty. (*Yale*)

The history of the college curriculum in the United States

might well be written from five formal papers. The two latest we have spoken of—the incorporation of the Carnegie Institution and the Report of the Committee of Ten. Of the third, though it related specifically to the work of a single college (Yale), the effect of it was widespread. It was long quoted in the institution itself as a final statement of what the aim of education should always be, and, from the number of younger institutions which were established under its influence, we can gather how powerful it was in forming public opinion on the subject of the proper curriculum.

But even in its strongest recommendations, the report shows how contrary to the proper ideals of American scholarship was the scheme advocated. There is in it no room for growth and flexibility, and, when considered closely, it is seen to consist of a local adaptation of an earlier and more admirable paper that had been put into active service years before in another and younger establishment. Here, on the one hand, is a plan of a course of study prepared and put in force in the University of Pennsylvania in 1756. With it we place the report of the Yale Faculty Committee, as published in Vol. XV. of the *American Journal of Science*. They might almost be transposed, so nearly identical is their subject matter. When taken together the two papers reveal how absolutely fatal to the growth of our colleges was the Revolutionary War. The troubled condition of the Revolutionary times not only diminished the number of the students, and destroyed the records and the buildings in which the colleges were housed, but gave little leisure for those in charge of the establishments to plan for alterations of methods of instruction. When they assembled on the return of peace, it sufficed if they could conduct affairs even nominally along the old lines. The war had effectually closed the avenue whence new ideas were to be derived, and the bare question of subsistence was too prominently in the foreground to admit of serious discussion of anything else. Books were scarce and costly. Authorship of texts and manuals was not yet a trade. The sciences were young and timid at their first entrance, and the Romance tongues were suspiciously easy of

acquisition and bore the brand of popery, at least in New England. The Teutonic branch of literature was too uncouth and barbarous to merit notice; except among a few unfortunate individuals who were burdened with it for a mother tongue, and these were encouraged to slough off their disadvantage as soon as possible. There was no source of a new supply of ideas, and well was it that in 1756 the clear, individual thinking of William Smith, or the accident of his earlier association with Scottish educational reform, had provided the American College with a program adequate for its immediate needs. That this course of study long outlived its usefulness, and was distorted almost beyond recognition at the hands of zealous partisans of special departments, should not diminish our regard for it as an epoch-making system.

Previous to the publication of the program prepared by the first Provost of the University of Pennsylvania, there was nothing in the United States that in any way resembled a modern course of study. Columbia and Princeton were hardly organized. William and Mary, in Virginia, was closely following the example of Oxford. Yale, in Connecticut, and Harvard, in Massachusetts, were practicing the principles enunciated by Henry Dunster, the first President of the latter institution, in 1642, and had sworn allegiance to our earliest collegiate standing order and to a curriculum that had Divinity for its corner-stone.

It is difficult for us to picture the feebleness of these early colleges. We cannot overestimate the devotion of their friends. However grand and splendid the future of these institutions, it can never equal the fame that should rightly belong to the fearless, indomitable heroes who labored faithfully, in painful surroundings, zealously and anxiously to found, establish and consecrate to sound learning these objects of their care. The closer we study their lives and circumstances, the greater seem their tasks. With no resources but "an unconquerable hope," in a wilderness newly cleared, where civilization groped its way, they successfully reared in barren fields their rough-hewn buildings and laid the foundations of our

collegiate education. What was then done in New York, in Elizabethtown, in Philadelphia, in Williamsburg, on the banks of the Connecticut, and on the shores of the Charles, has been felt not only in the institutions in these places established, but has influenced the whole course of our collegiate history through the length and breadth of the land.

In a discussion of the history of the Curriculum of the Colleges in the United States, therefore, it is not necessary to consider many institutions. The later and the smaller colleges are but children of the older and the larger. The traditions, customs and government of the one have been carried to the other as the sacred fire brought from the temple of Vesta lighted the hearth in the newly-established household. It is the larger and the older colleges that present the problem in its clearest shape. It is to these that our chief attention will be directed.

CHAPTER II

THE FIVE FORMAL DOCUMENTS

THOUGH the five documents already cited (1. the Laws of President Dunster, 1642; 2. the Programme of the First Provost of Pennsylvania, 1756; 3. the Report of the Yale faculty, 1828; 4. the report of the Committee of Ten, 1892; 5. the Incorporation of the Carnegie Institution, 1902) contain, in brief, a history of the progress of the course of study in the colleges in the United States, in considering, in detail, the curriculum of the higher education it will be found convenient to divide the subject into three periods, to be denominated respectively: The pre-Revolutionary—from the founding of Harvard to the inauguration of the reforms of President Madison at William and Mary, 1636-1779; the post-Revolutionary—from the reforms of President Madison to the inauguration of President Eliot of Harvard, 1779-1869; the Modern period from the inauguration of President Eliot to the Incorporation of the Carnegie Institution, 1869-1902.

The first of these periods is the period of beginnings. The ideals are those of the institutions whence the first officers and friends of the new establishments came, and there is no thought that new occasions will teach any new duties to the young seminaries in the wilderness. Each was to be, so far as possible, an Oxford, a Cambridge, or an Edinburgh, and success was attained only so far as the model set by the parent was reproduced by the child.¹

¹ "And they are hereby Authoriz'd & impowered by their President & in his Absence by the Senior Fellow or one of the Fellows appointed by themselves at the Anniversary Commencements or at any other times and at all Times hereafter to Admit to & Confer any & all the Learned Degrees which can or ought to be given and conferred in any of the Colleges and Universities in America, Europe & particularly in the University in Cambridge & Edinburgh in Great Britain."—*Charter of Brown University*, 1764.

But, with the breaking of the bonds which bound the colonies to the mother country at the Revolutionary War, the colleges found themselves cut off from the source whence their inspiration had, up to this time, flowed; they could no longer hope to secure patronage, books or teachers from across the sea; a new ideal was placed before them, their possible sphere of usefulness was enlarged, and their means of attaining success were now tremendously modified by restricted resources. It is these facts that make the second period a period of adjustment. It is the time when the college becomes conscious of its possibilities and potentialities; of its power for service and its strength; of its discovery of its usefulness to the newly independent people, and of its effort to demonstrate the necessary part it felt was rightly its own in the shaping of the destinies of the national future.

This second period cannot be firmly marked off from the period that succeeds it. There was nothing violent in the transition from the old to the new. The modern period is called oftentimes the period of reform. Possibly alterations in educational methods have occurred with greater frequency in recent years than formerly. The public may have grown sensitive in regard to these matters, and slight changes in text-books and the order of studies may now be regarded more critically than heretofore. But the spirit of the college has never been radical, and the germs of all the ideas of the present are to be found exemplified in the past. Even the elective system and the scientific and modern language movements, which are supposed to be typical of to-day, were all of them introduced into the college of William and Mary during President Madison's administration in 1779. The scheme of study that is now the basis of all college curricula was initiated in America in the University of Pennsylvania, in 1756, and the three-year course that is the latest modification of the scholastic routine, what is it but a return to the original plan under which Harvard and Yale began? Pennsylvania continued well into the nineteenth century to confer the degree at the end of the third year. William and Mary had the same plan

of required residence, but President Dunster shows clearly in a document in the Harvard archives that four years were then considered necessary, at Cambridge, England, for undergraduate residence and that he desired to introduce the same system into the young institution in his charge.

This manuscript, in the handwriting of Dunster, has been for some time hidden in the carefully arranged archives of Harvard. It is written on paper of letter size, in a sheet of four pages; the language is Latin, with a few additions in English; the handwriting, when compared with the facsimile reprint of the letter published by the Colonial Society of Massachusetts in 1897, shows it to be undoubtedly President Dunster's; the subject-matter is closely related to the code of laws passed by the newly constituted Board of Overseers in 1642.

So close is this relation that the first six lines of the manuscript are an almost exact repetition of paragraph 18 of these laws, as found in Quincy's *History of Harvard*, Volume 1, Appendix LVII.¹ The rest of the paper appears to be an elucidation of the point mentioned with the addition of certain facts, taken from Dunster's own college career at Magdalene College, Cambridge, to support an argument for the necessity of proper regulations in connection with the newly established Harvard.

The text of the document is as follows:

"Quicumque scholaris, probatione habitâ, poterit sacras utriusque Instrumenti Scripturas de Textu Originali Latine interpretari et logice resolvere, fueritque naturalis et moralis philosophiae principiis imbutus, vitæque et moribus inculpatus, et publicis quibusvis Comitibus ab Inspectoribus et Praeside Collegii approbatus, primo suo gradu possit ornari: alias nullus expectabit, nisi qui quadriennium in collegio transegerit, in quo inculpate vitam degerit, et omnia exercitia publica sedula observarit.

"Per hanc legem Scholares ne unumquidem temporis minutum diutius in Collegio Nostro comorari tenentur, priusquam Magistri

¹ In the fourth line the manuscript has *et moribus*.

Quincy, *ac moribus*.

Artium fiant, quam ordinario in omnibus Cantabrigiae Collegiis apud Anglos et per consequens nec diutius ante Baccalaureatum nostrabis manebunt, quam temporis interstitium postulat, quo illi nos preoccupant dum inchoante anno apud eos Studentes Baccalaureatum suscipiant, nostri vero mense sexto.

“De hac positione siquis dubitet, quae subscripta sunt, legat.

“Mos Academiae Cantabrigiensis quatenus respicit tempus studentium qui primum in Artibus gradum suscipiunt est hujusmodi.

“Recentes sint admissi Solstitio aestivo 1627 termino (ubi dicunt) Paschali duodecim terminos deinceps ante Baccalaureatum sic complebunt. 1m terminum Paschalem, in quo admissi fuerint qui durat ad Comitia publica sub initio Julii. 2m terminum Michaelis intra undecimum Octobris et Solstitium brumale. 3m terminum Hilarii intra Januarium et finem quadragesimae. Sic absolvitur annus primus nimirum 1627 qui ecclesiastice absolvi dicitur 25to Martii.

“Orditurque annus secundus 1628 quem dum transigunt Sophomori dicuntur nec adhuc intra interiora Sophistarum Scholae repagula illis fas erit ingredi.

“Ad 3m deinde pervenientes Annum termino Paschali Juniores Sophistae appellantur, quibus tum primum patent repagula; nondum tamen publice ibidem disputandi concessa est facultas anno 1629.

“Ad 4m tandem annum attingentes post quadragesimam, anno 1630, Seniores Sophistae coram moderatore durantes termino Paschali Scholis publicis publice disputant cum ante tum etiam post Comitia publica termino Michaelis ad Solstitium usque Brunale.

“Post festum denique nativitatis termino Hilarii 1631 (computatione historica) primo intra collegii parietes in sacello puta vel Aula publica per aliquot dies examinandi sedent; ubi approbati quaestionistae postea in Scholis publicis sedentes post consuetum examen digni qui habentur, sub initio quadragesimae fiunt Baccalaurei.

“II. Hic mos legibus et statutis Academicis consentit, quarum exemplar impressum habeo et quatenus ad presens negotium expectat, subscriptum sequitur.

“Statua in Admissione Baccalaureorum in Artibus &c.

“Primus annus Rhetoricam docebit, secundus et tertius Dia-

lecticam, quartus adjungat Philosophiam: et Artium istarum domi forisque probatione temporibus quisque sit Auditor. In hoc quadriennio bis quisque disputato in publicis Scholis, bisque respondeto in suo grege; quae si perfecerit, et post consuetum examen dignus videatur, Baccalaureus esto; [ita tamen quod prius respondeat quaestione et arte in quadragesima more consueto, usque ad postremum actum et super his cansionem realem exponat.]

"III. Praedictae propositionis veritas liquet publicis (ut aiunt) supplicationibus.

"Supplicat Reverentiis vestris A. B. ut duodecim termini completi in quibus usitatas lectiones audivit (licet non omnino secundum formam statuti) una cum omnibus Disputationibus Declamationibus caeterisque exercitiis per statuta Regia requisitis sufficiant ei ad respondendum quaestioni.

"IIII. Demonstratur 4^{to} predicta propositio ab impossibili seu absurdo sic:

"Scholares ante Baccalaureatum in Academia manent aut per integrum biennium tantum cum supplemento aliquot mensium; aut integrum triennium cum praedicto supplemento. At quod non per biennium tantum, ist est in confes (*text incomplete*) 2d et tum 8 terminis completis gradum susciperent nono, ut computando regietis quod nullus dicet: ergo per triennium, in quo undecem terminis completis gradum suscipiunt duodecimo.

"V. Denique aut Studentes integrum triennium cum supplemento in collegio degunt, aut Scholares quinque annorum qui nullum susciperent gradum, simul in collegio esse nequirent. At quod esse possint, exemplo proxime subscripto mox demonstrabitur. Et experientia quotannis indicat.

"VI. Postremo igitur luculentissimo et absque omni dubio constat exemplo historico E. gr.

"Admissi sunt Baker, Murial, Dunster, Saltmarsh, mense 3^{to} 1627. Noverunt in Collegio Russell, Foster, Sophomoros dictos, superiore anno 1626 admissos; Kelk, Joannes, &c. Juniores sophistas anni 1625, Wickley, Welch & Seniores sophistas admissos 1624. Ante finem vero Octobris 1627 admissum vident Orlando Eliot insequentis anni fratrem seniore. Post festam Nativitatis durante termino Hilarii fiunt Baccalaurei Wickley et Welch &c. anno 1628 inchoante. Kelk et Joannes &c. 1629. Russell et Foster 1630. Baker et Dunster &c. 1631. Eliot cum sociis 1632.

Studentes ergo quinque annorum qui nullum susceperunt gradum, simul in collegio esse possunt, et per consequens qui per tempus brevissimum in Collegio manent, integrum triennium et septem menses at minimum Collegiis ordinario commorantur priusquam Baccalaurei fiunt, et consequenter integrum septennium priusquam in artibus magistri esse possunt. Nec alias apud nos qui admittunt graduatos pro more acad. in Anglia.

“Quod autem respicit temporis interstitium quod absolvunt Baccalaurei priusquam fiunt Artium Magistri, si sub dissertatione apud nullos nostrum cadit, supervacaneus igitur hac de re instituetur discursus. Primum statutum in admissione inceptorum in artibus legendum tantum modo describemus, quod subloquitur.

“Baccaulaurei Artium Philosophiae lectionis, Astronomiae, Perspectivae, sive Mathematicarum quae in scholis lecta fuerint, et Graecae linguae per triennium ad minus sint assidui Auditores, idque quod inchoatum antea erat, sua industria perficiant. Intererunt cunctis magistrarum artium disputationibus agente capite: nec abibunt inde, nisi a Procuratoribus petita venia. Baccalaureus quisque ter respondebit Magistro obicienti: bis in sui gregis exercitatione respondebit, declamabit semel. In his ubi justum trium annorum spatium versatus fuerit, et haec illum perfecisse constiterit, postquam solemniter productus fuerit, cooptabitur in magistrorum ordinem.

“Denique hanc unicam quaestionem soleant Academici mihi dissidentes; an scilicet recentes jam admissi plus temporis solent coterere priusquam Baccalaurei fiant, An jam facti priusquam in Magistrorum ordinem cooptentur? Nullus datur ubi autumno quin respondebit; Baccalaurei minus temporis conterunt quam recentes agant igitur Baccalaurei triennium integrum cum mantissa (cum aiunt) manent priusquam sint Magistri. Quandiu igitur recentes morabuntur priusquam fiunt Baccalaurei.

“Quadriennium igitur plus minus in Collegio degere oportet studentes priusquam fierunt Baccalaurei, et integrum septennium priusquam in artibus magistri sint habendi. Si (per morem Accademiæ in Anglia) nostrae admissionis forma retinebitur in veritate est.”¹

¹ A not too literal rendering of the above may stand as follows:

“Every scholar that on proof is found able to translate the original of the Old and New Testament into the Latin tongue, and to resolve them logically, and shall be imbued with the beginnings of natural and moral

The following paragraphs are written in English :

philosophy, withal being of honest life and conversation, and at any public act hath the approbation of the Overseers and Master of the college, may be invested with his first degree; but no one will expect this degree unless he shall have passed four years in college and has maintained therein a blameless life and has sedulously observed all public exercises.

By this law the scholars will not remain in our college one minute longer before they become M. A. than ordinarily they do in all the Cambridge Colleges in England, nor will they remain longer in our colleges before they become B. A. than the interval of time demands by which they precede us, in that students with them receive the B. A. at the beginning of the year, but ours in the sixth month.

Concerning this position, if any one doubts, let him read what is written below.

The custom of the Cambridge Academy, so far as it concerns the time for those students who receive their first degree in arts, is in this fashion: The new students are to be admitted at the Summer Solstice, 1627 (as they say), at the Easter Term. They will then thus complete the twelve terms in order before they become B. A. in this manner.

First term, Easter, in which they were admitted, which lasts until the public commencement at the beginning of July. Second term, the Michaelmas term, between the eleventh of October and the Winter Solstice. The third term, Hilary Term, between January and the end of Lent. Thus the first year, namely, 1627, is completed, which is said by the Church ecclesiastically to end on the 25th of March.

The second year begins 1628. While they pass through this they are called Sophomores, nor as yet will it be right for them to enter the inner bounds of the Sophister School.

Coming, then, to the third year at Easter they are called Junior Sophisters, to whom for the first time the bounds are open; not yet, however, is conceded the privilege of disputing in public in 1629.

At the beginning of the fourth year after Lent, in the year 1630, the Senior Sophisters, in the presence of their tutor, during the Easter term, dispute publicly in the public schools; both before that time and after the public commencement in the Michaelmas Term, up to the Winter Solstice; then after the Feast of the Nativity in the Hilary Term, 1631 (by the historical computation), for the first time within the college walls they sit in the Chapel, or the public hall, through the several days of examination; then by questions (?) they are tested later in the public schools, and those who are found worthy by the customary examinations are made Bachelors by the beginning of Lent.

II. This custom agrees with the law and custom of this academy, of which I have a printed copy, and so far as it concerns the present business the writing follows:

Statute on the admission of Baccalaureates in Arts, etc.

The first year shall teach Rhetoric, second and third years Dialectics, and the fourth year shall add Philosophy; and of those arts in his study

"The order of the University of Oxford concerning the Degrees of Bachelors and Masters of Art.

and in class-room each one is a pupil according to the arrangement of the schedule (?). In this course of four years each one shall dispute twice in the public schools and shall respond twice in his own class; which if he performs, and is found worthy after the regular examination, he shall become an A. B. Yet, also, what he replied before in Lent, according to custom, by question and answer, even to the last exercise, shall show forth his true ability. [*Text not clear.*]

III. The truth of the aforementioned proposition becomes apparent by the Public Supplications, as they are called.

The A. B. supplicates your Reverences that twelve terms completed, in which they hear ordinary lectures (although not entirely according to the form of the statute), at the same time with all disputations, declamations and other exercises required by royal statutes, be sufficient to him to respond to questions.

IV. The aforesaid proposition that has been mentioned above is demonstrated by the impossible or absurd thus:

Scholars before being A. B. remain in the academy only through an entire two year with the addition of several months, or three years, with the above-mentioned supplement. But that they do not stay only two years . . . then they would get the degree when eight terms had been completed, in the ninth term . . . which no one will say. Therefore, in three years in which eleven terms have been completed, they receive the degree in the twelfth.

V. In short, either the students remain through the entire three years with the supplement in college, or scholars would not be able to remain in college for five years and take no degree. But that they can so remain shall be proven by the example immediately following, and shows that experience every year.

VI. Lastly, it is shown by a very clear and without any doubt an historical example Egr.

There were admitted Baker, Murial, Dunster, Saltmarsh, in the third month, 1627. They knew in college Russell, Foster, called Sophomores, admitted in the previous year, 1626; Kelk, Joanes, &c., Junior Sophisters of the year 1625; Wickley, Welch, &c., Senior Sophisters, admitted 1624. But at the end, indeed, of the following October, 1627, they see admitted Orlando Elliott, an older brother of the following year. After the Feast of the Nativity, during the Hilary Term, Wickley and Welch were made A. B.'s, at the beginning of the year 1628; Kelk and Joannes, &c., 1629; Russell and Foster, 1630; Baker and Dunster, &c., 1631; Elliott, with his classmates, 1632. Therefore, the five-year students who took no degree came to be in college together, and consequently those who remain in college for the shortest time remain for the entire three years and seven months at least before they become A. B.'s, and consequently a complete seven years before they could be M. A.'s. Nor is it otherwise

" 1. Such as were admitted into colleges and Halls were within a few months limited to be matriculated and registered.

" Then being Sophisters they might dispute (if they were able) in the Schools and after four years' study in Logic and Philosophy with approbation of the house, and public trial, proceed Bachelors of Art, whereupon they had allowances to take pupils, and read to them, and not before.

" 2. After three years' study in the arts upon approbation of the house and public examination, the reading of six lectures in natural and moral philosophy, and public disputing in the Schools with certain *Scioes* upon other of their skill in the arts and good conversation, to be admitted Masters in the Convocation House by the Vice Chancellors, Proctors and Regents. And bound withal *stare in comitiis* in ye act following when they were sworn

among us who admit graduates after the custom of the academy in England.

As to the interval of time which B. A.'s spend before they become M. A.'s, if this falls under discussion with none of us, a superfluous argument would then be instituted. The first statute to be written concerning admission of new students in arts we will merely describe as follows:

Bachelors of Art shall be assiduous pupils through three years at least of the Philosophical study, Astronomy Perspective, or Mathematics which shall be taught in the schools, and Greek, and whatever was begun before by their own industry they shall finish. They shall attend all the disputations of the Masters of Art under monitors (?), nor shall they be absent thence unless they have asked permission of the tutor. Every Bachelor shall respond three times to the Master who is opposed, twice in the exercises of his own class he shall respond, and shall declaim once. In these things, when he shall have passed the space of three years, and it shall be clear that he has accomplished them, after he has been solemnly presented, he shall be installed in the order of Masters.

The Academicians who disagree with me are accustomed to put this simple question, *i. e.*, are those who have been recently admitted accustomed to waste more time before they become Bachelors or after they become Bachelors, before they are received in the order of Masters?

There is no one but will reply, Baccalaureates waste less time than Freshmen. (*Text obscure*). Therefore they say, Bachelors the entire three years remain with the supplement (as they say) before they are made Masters. Thus, so long as the Freshmen remain before they become Bachelors.

Therefore, four years more or less in college is necessary for students to remain before they shall become Baccalaureates, and the entire seven years before they shall receive their Master of Arts. Whether [in the manner of the Academies in England] the form of our admission will be retained is in truth the question for discussion."

to the statutes of the University *et non suscipe gradum, Simonis*. So that seven years was the ordinary time for their proceeding.

"3. The eldest son of noblemen or knights (or of compounders who were to wear scarlet) or other great persons might be admitted sooner (if the University pleased). But it was extraordinary and per concession.

"This was the usual manner in former times herein.

Tytis MR. W. NORRIE.

My own feeling in regard to this paper is that we have in it a small portion of the address of the young president of Harvard to his Board of Overseers when he first offered to this august body the original regulations of 1642. If it is not a portion of the address, it certainly contains minutes on which the final report was based, and is none the less interesting and valuable both educationally and historically.

The letters filed with it,¹ show its history until it came into

¹ The account of the "annexation" of the manuscript is as follows:

ATTLEBORO, MASS., FEB. 1, 1871.

JOHN LANGDON SIBLEY, ESQ.,

Librarian:

Dear Sir:—Enclosed please find the paper in President Dunster's handwriting to which I referred in my letter of 30th ult. I may be mistaken in its purport (not being able to read Latin), if so please excuse me on the principle that I meant well. If you are interested in it I shall be glad—it was with other writings of his, which appear to be *chronological*, also in Latin, with some Greek and occasional Hebrew, given to my son Edward by the last of the *Isaiah* branch of the Dunster family. The same old lady also gave him the originals of the "Dunster papers" published by Mass. His. Society about 1854. As I have the *originals* I should like to keep *all the papers* together so if you please I should like this returned after you have done with it.

I remain, yours truly,

SAMUEL DUNSTER,

Attleboro, Mass.

CAMBRIDGE, 11, SEPT. 1873.

Dear Sir:—

I will send the other Dunster paper by mail before long. It is hard to read and copy; but I should like to copy it first, for if any accident by fire or otherwise should happen to this copy there is no other.

Yours,

J. L. SIBLEY.

This volume annexed

March 1, 1889, by me

JUSTIN WINSOR, *Libr.*

The faded ink of the manuscript and the fact that at some period of its

the possession of the University. We cannot help some regret that this is the only fragment of the interesting collection of which it so recently formed a part, that has been preserved. Diligent inquiry among the descendants of Henry Dunster, East and West, and an inspection of the papers of the late Samuel Dunster, of Attleboro, Mass., fail to reveal any trace of the "other writings." Possibly in some out-of-the-way corner or forgotten chest, these may sometimes be discovered, and we shall be permitted to appreciate more fully than we can at present, the scholarly attainments of the first president of Harvard College. His fidelity, integrity, and zeal are matters of common knowledge.

This document is a valuable link in the chain of evidence to show how closely Harvard was bound to the English college, and reveals how entirely Dunster was committed to reproduce on the banks of the Charles the ideals he had found established on the banks of the Cam. It is difficult to see how Dunster could have thought of any other than the Cambridge method. The university, when he attended it, "was then in the full flush of its prosperity on that old system of university education, which combined Latin and Greek studies with plentiful drill and disputation in the scholastic logic and philosophy, with but little of physical science and next to no mathematics." ¹

More particularly do we learn of its methods and discipline in the account Dr. Masson has given of John Milton's course at Christ's College ² which closed two years previous to Dunster's graduation from Magdalene, and of John Harvard's from Emanuell, in 1631. But although it was the munificence of the latter that enabled the young institution to establish itself and rightly bear his name, the development of the enterprise

history it was folded into a small compass render the task of deciphering it somewhat difficult. The handwriting is itself peculiar and worn with time, the lighter strokes having almost gone from sight. But with the cordial assistance of Mr. A. C. Moore, of Harvard University, and Mrs. L. P. Bates, of Providence, the text of the document is here presented.

¹ Ency. Brit., vol. xvi, p. 324. Dr. Masson.

² Life of Milton. Masson, vol. i.

owed more to the conscientious devotion and scholarly attainments of Henry Dunster than anyone else.¹

It was to Dunster's efforts that was due the first programme of study and, as published in New England's First Fruits, has been carefully analysed as follows:

"(1) The course of study was for three years,² and was arranged for the so-called First, Second and Third Classes. The first classic was of third-year men.

"(2) The attention of each class was concentrated for an entire day upon one or two studies, with 'theory' in the forenoon and 'practice' in the afternoon.

"(3) Monday and Tuesday were devoted to philosophy, including logic and physics for the first year, ethics and politics for the second year, with arithmetic, geometry, and astronomy for the third year. All this work was done in the morning hours. In the afternoon came philosophical disputations for each class in his own field of study ('every one in his art').

"(4) Wednesday was Greek day for all classes. First-year men studied etymology and syntax in the forenoon, and practiced the rules of grammar in the afternoon; the second class studied prosody and dialectics from 9 to 10 a. m., and practiced in poesy after dinner; third-year men did likewise in the theory and practice of Greek composition, prose and verse.

"(5) Thursday was devoted to the 'Eastern tongues,' with the theory of Hebrew, Chaldee, and Syriac grammar in the morning, and practice in corresponding Biblical texts in the afternoon.

"(6) Friday was given up to rhetoric. All students were taught the principles of rhetoric, and all were required to practice English composition, and once a month to declaim.

"(7) Saturday, at 8 o'clock in the morning all the students were taught 'Divinity Catechetically,' and at 9 o'clock 'Common Places.' These latter were common topics of scholastic discussion and digests of doctrine, argument or opinion.

¹ Publications Colonial Society of Massachusetts, 1897.

² The extension of the course to four years probably dates from 1654. President Wadsworth states in the index compiled by him to *Book II of the Harvard Records*: "First degrees are, 1654, denied to those of three years' standing."

"(8) The last and least place in this otherwise excellent curriculum was given to history and nature. At 1 o'clock Saturday afternoon, immediately after the 12 o'clock dinner, and at the fag end of the week, the students were taught history in the winter, and the nature of plants in the summer."¹

Dr. Adams quotes President Quincy to show that "The Principles of Education established under the authority of Dr. Dunster were not materially changed during the whole of the seventeenth century."² A corroboration of this view is given in a notebook of Dr. Pierson, the first rector of Yale,³ that contains items relating to logic, ethics, metaphysics, physics and divinity.

Further evidence of the validity of the remark is to be found in a manuscript in the Harvard archives, that bears a penciled date of 1690.⁴ It purports to be "A particular account of the present Stated Exercise Enjoined the Students," and shows that very nearly the original scheme was in force at that time, with the rounding-out of the intended four-year course.

"The First year the Freshmen recite the classic authority learned at school, viz.: Tully, Forsahe, Virgil, Homer, with the Greek Testament and Dugard or Farnanus Rhetoric and Greek catechism. The latter part of the year the Hebrew grammar and Psalter, Ramus and Burgerdicius Logic. The second year, the Sophomores recite Burgerdicius Logic and a manuscript called the new logic extracted from Legrand and ars cogitans, Wollebius on Saturday, and in the latter part of the year Here-

¹ Dr. Herbert B. Adams, *Study of History in American Colleges*, p. 12.

² President Quincy's *History of Harvard*, vol. i, p. 191.

³ Dr. Pierson was a student of Harvard, where he graduated in 1668, during the presidency of Dr. Charles Chauncy, (1654-1671). From what we have learned of the curriculum in 1642, we may readily believe that the little notebook of Rector Pierson gives a fair idea of what was taught at Harvard at this time. It is a small 4 inch by 6 inch notebook, closely written in Latin and in English indiscriminately; altogether it shows that diligent, faithful work was done by this student of Harvard, and that the curriculum, though narrow, was conscientiously administered.

⁴ Harvard College papers, vol. i (1650-1763, No. 31).

bard Meletemata continuing till most part of the year recitations in the fore-mentioned Greek and Hebrew books and disputes on logical questions twice a week.

"The Third year the Junior Sophisters recite Herebard's Meletemata, Mr. Morton's Physics, Dr. More's Ethicks, a system of Geography and a system of Metaphysics and Wollebius Divinity on Saturdays, and dispute twice a week on Physical and Metaphysical and ethical questions. The Fourth year the Senior Sophisters recite Alfred's Geometry, Gassendus' Astronomy, go over the arts, viz.: Grammar, logic and natural philosophy, Ames' Medulla and dispute once a week on philosophical and astronomical questions." A letter written to President Stiles of Yale, by the last survivor of the class of 1713 of that institution, shows that not only in the seventeenth but also in the eighteenth century the original scheme of studies as enunciated for the founders of Harvard was even then approved.¹

¹ *Dexter's Annals*, vol. i, page 115.

NORWICH, MAY 28TH, 1779.

Revd. and Hond. Sir:

Received your favour by Lovet, with your unmerited complaisance. As to your Queries, cannot say much. However, would say what I know. As to Mr. Pierson, the first Rector of the Collegiate School (as then called) in its infant state at Killingworth, whether with any formality installed and how, I cannot say. Books of the Languages and Sciences recited in my day were Tully and Virgil, but without any notes; Burgerdicius* and Ramus's Logick; also Heerebord's set(?) Logic, &c.; Pierson's manuscript of Physicks, which I have no copy of. We recited the Greek Testament; knew not Homer, &c.; recited the Psalms in Hebrew and in other languages. We recited Ames' Medulla on Saturdays, and also his Cases of Conscience sometimes; the two upper classes used to dispute syllogistically twice or thrice a week.

On Commencements, Rector Andrew always presided at Saybrook in my day, and the Commencement always in ye meeting house, unless ye first year or two, which I don't remember if it were so. These were held both parts of ye day, began and ended with prayer; the disputations carried on much as since, a Salutatory and Valedictory oration, but none in English as now.

The Rector gave degrees much in the present form (no pro modo

* (Sir William Hamilton, in his *Logic*, speaks of Burgerdicius as the one principally deserving commendation among the old Latin manuals; it was at this same date in use at Cambridge University, England.)

This testimony is supplemented by that of Dr. Johnson, of the same class at Yale, on whose authority it is stated¹ that "the utmost as to classical learning that was now generally aimed at, and indeed for twenty or thirty years after, was no more than to construe five or six of Tully's Orations, and as many books of Virgil, poorly, and most of the Greek Testament, with some chapters of the Hebrew Psalter.

Common Arithmetic and a little surveying were the ne plus ultra of mathematical acquirements."

President Wadsworth of Harvard, (1725-1736), tells, in his diary, the same story,² and the earliest copies of the laws

Anglice then); when he came to ye words "hunc Librum," he gave ye candidates a little book into their hands, which they returned for ye next, for they came up only two by two; no Diplomas were delivered then.

The Rector, previous to the giving of Degrees, asked the consent of the Trustees, saying, "Placetne vobis," &c., to which they answered, "Placet, placet, ..."

Who were chief orators in my day? I'm ye less able to say. Oratory was but little known, studied, or famed, to what it is now. Indeed, Composition and Language were scarcely eno in vogue to excite ambition where there might be a genius for it, but if any, Dr. Johnson was the man that looked that way.

As for Mathematicks, we recited and studied but little more than the rudiments of it, some of ye plainest things in it. Our advantages in that day were too low for any to rise high in the branches of literature. However, the College then was an infant, that might grow to ye perfection of manhood, as we see evident in many things, in this for one. The first printed Thesis and Catalogue, very small, was like ye State of Infancy; exhibited in ye year 1714, printed at Boston under ye inspection of Dr. Cotton Mather.* The Catalogue, with ye Theses, were all on a small sheet. The numbers now, with other marks of perfection of our College State, truly surprising.

Yours to serve,

BENJ. LORD.

¹ *Life*, by Chandler, p. 5.

² "(1) While ye students are freshmen, they commonly recite ye Grammars, and with them Recitations in Tully, Virgil, ye Greek Testament on Mondays, Tuesdays, Wednesdays and Thursdays in ye mornings and forenoon; on Friday mornings Dugard's or Fornaley's Rhetoric, and on Saturday morning ye Greek Catechism, and towards ye latter end of ye year

* By Dexter. No copy of this, our earliest printed document, is now known: the publication was undertaken with the hope (which proved successful) of attracting donations from England.

—or rather what is termed “Orders and Appointments to be observed in ye Collegiate School in Connecticut:” (1726)—formulated the same idea.¹

they dispute on Ramus’s definitions, Mondays and Tuesdays in ye forenoon.

“(2) The Sophomores recite Burgerdicius Logick, and a manuscript called *New Logick* in ye mornings and forenoons; and towards ye latter end of ye year, Herebords Meletemata, and dispute Mondays and Tuesdays in ye forenoon; continuing also to recite ye classick Authors with ye Logick and Natural Philosophy; on Saturday mornings they recite Wallebius’ Divinity.

“(3) The Junior Sophisters recite Herebord’s Meletemata, Mr. Morton’s Physicks, More’s Ethicks, Geography, Metaphysics, in ye mornings and forenoons; Wallebius on Saturday morning; dispute Mondays and Tuesdays in ye forenoons.

“(4) The Senior Sophisters, besides Arithmetick, recite Allsted’s Geometry, Gassendus’s Astronomy in ye mornings; go over the arts towards ye latter end of ye year; Ames Medulla on Saturdays; dispute once a week.”

This is signed by Henry Flynt, William Welsteed and Nathan Prince, and bears, in President Wadsworth’s handwriting, “Yt I write March 15, 1725/6. It was given in some few years before to ye overseers.”

¹ *Dexter’s Annals*, vol. i, pp. 348-9.

“It is appointed yt some part of ye Holy Scriptures be Read in morning and evening prayer In ye hall, and exposition be made thereon by ye Rector, and all undergraduates shall be present and attend thereunto, and their absence from it shall be punishable, as well as their absence from prayer, and there shall be an analysis which shall be Read by one of ye batchellors or sophisters in their course thrice in a fortnight, whereby their skill in logick and Rhetorick may be increased.

“All undergraduates, except freshmen, who shall Read english into Greek, shall read some part of ye old testament out of Hebrew into Greek in ye morning, and shall turn some part of ye new testament out of ye english or lattin into ye Greek att evening att ye time of Rescitation before they begin to recite ye originall tongues.

“All undergraduates shall publickly Repeat sermons in ye hall in their Course, and also batchellors, and be constantly examined on Sabbaths at evening prayer.

“All students shall, after they have done reciting rhetoric and ethicks on fridays, recite Wolebius theology, and on Saturday morning they shall Recite Ames theologie thesis in his Medulla, and on saturday evening ye Assemblies shorter Chatechism in lattin, and on Sabbath Day attend ye explication of Ames Cases of Conscience.

“In ye first year after admission on ye four first Days of ye week all students shall be exercised in ye Greek and Hebrew tongues onely beginning logick in ye morning att ye latter end of ye year unless their tutors see cause, by Reason of their Ripeness in ye tongues, to Read logick to

These various schemes, when compared with each other and

them sooner; they shall spend ye second year in ye logick with ye exercise of themselves in ye tongues; the third year principally in phisicks; and ye fourth year in metaphisicks and mathematicks; still Carrying on ye former studies; but in all Classes ye last Days of ye week are allowed perpetually for Rhetorick, oratory and Divinity, and in teaching of both tongues, and Arts, and such Authors are to be used as shall be approved of by ye Rector and tutors, for their especial Care is to be exercised and their Directions Attended.

"All Students shall observe their Courses for Disputation in ye school, batcheldors once every week except two months for ye Commencement for ye Commencers and one month afterward for ye students, likewise all undergraduates shall Declaim once in six weeks, and ye number of ye Declaimers shall be so disposed yt in the space of six weeks all may Declaim excepting as before mentioned.

"No scholar shall use ye english tongue in ye College with his fellow-scholars unless he be Called to publick exercise proper to be attended in ye english tongue, but scholars in their chambers and when they are together shall talk lattin.

"Students shall attend their Disputations and appointed Rescertations in ye last year of their non-graduation untill ye fifteenth of July, and when they have passed ye probation they shall continue Resident in ye school and not Remove from it without liberty from ye Rector or tutors.¹

"It is ordered yt at ye expiration of four years continuation in ye school a student not Culpable, and convicted of Gross immoralities and scandals, shall, on his Desire and at his own Charge, being approved in his own approbation, Receive a Diploma for a degree of baccalaurei, and after three years more, in like manner, shall Receive a Diploma for a master, but for ye special encouragement of students in their Diligence it is ordered that if a student at ye end of three years continuance in ye school shall in his probation manifest expertness in Reading ye Hebrew into Greek and into lattin, and Grammatically Resolving ye said languages and in answering such questions in their systems of logick and in ye principles of naturall philosophy and metaphisicks as ye Rector or any of ye said trustees present att ye said probation shall see cause to propose to him, and be approved by ye trustees att Commencement, may receive a Diaploma for his first degree, and if two years after he shall compose of his own composure a written synopsis either of logick or naturall philosophy or metaphisicks, as also a common place on some Divinity thesis, and ye solution of two or three problems such as ye Rector shall propose to him, and be approved by ye trustees att Commencement, may Receive a Diploma for his second Degree, by one and ye other being free from scandalous immoralities by ye violation of any of these laws or otherwise.

"It (is) ordered yt each and every student having performed said exercises in ye hall, shall be obliged to Deliver ye said exercises in writing to ye Rector or tutor on either of their Demands, and ye penalty of which

¹ *Dexter's Annals*, vol. i, pp. 350, 351.

with the requirements at Oxford and Cambridge, show that in this body of laws we have a fair definition of what has been vaguely expressed as our "time-honored system of college training." Probably even to the friends of this phrase the plan may appear a trifle peculiar, and it hardly seems as if anyone would to-day soberly advocate a return to it. Yet, if language defines anything, users of the term above quoted must mean that in this meagre curriculum is included their whole ideal in collegiate education; for modifications of this simple scheme diminish the integrity of the aim and have been too modern to merit the application of the definition "time honored."

As President Barnard of Columbia aptly says:¹

"Our earliest American Colleges were founded on the model of those of the British universities: and here, as there, their avowed design, at the time of their foundation, was not merely the general design to raise up a class of learned men; but specifically to raise up a class of learned men for the Christian Ministry. Here, as there, accordingly, the teachings consisted largely in the classics, with logic, geometry and physics (such modest and not wholly accurate physics as existed in that day); to which were added, according to Dr. Palfrey and Prof. Kingsley, in their historical statistics, Hebrew, Chaldaic, Syriac and dogmatic theology. This was the system which time had honored at Oxford and Cambridge, and which time continued to honor on this continent with very slight modifications down nearly to the close of the last century."

To Harvard, Yale owed its conception and its continued existence, its policy and its methods, for nearly half a century,²

refusal shall be publick admonition, and if after that ye said persons refusing continue Obstinate in such Refusals, he or they shall be liable to expulsion or such punishments as ye trustees shall inflict."

This provision for the abridged course of study was designed for the early years of school, but there is no evidence of its use later than 1710. (See above, page 18.)

¹ *Annual Report*, 1872, p. 31.

² Of the "Board of Collegiate Undertakers" that met in Saybrook, November 11th, 1701, Israel Chauncey, H. C. 1661; Abraham Pierson,

in fact, it was not until 1766 when Naphtali Daggett was chosen President that Yale had, as executive officer, one of her own sons. The traditions and practices that she received from Harvard, she transmitted in turn to the Institution, dating from its founding in Elizabethtown, in 1746, and finally settled and established at Princeton, N. J.¹

Of Princeton's early Presidents, Burr (*Yale College*, 1735) was the longest in office. The young institution owed much to his wisdom and sagacity. The course of study, revealed from private documents, shows clearly whence its origin, and though the addition of certain apparatus presages the growth of science; the outline of the course is a familiar one.

Logic and the use of globes, Rhetoric and Mathematics, Horace, Virgil and the Greek Testament, Xenophon, Watt's

H. C. 1668; Thomas Buckingham, H. C. 1690; Samuel Andrew, H. C. 1675; James Pierpont, H. C. 1681; Noahdiah Russell, H. C. 1681, and Joseph Webb, H. C. 1684, there was not one who was not a graduate of the older institution. The first Rector, Abraham Pierson, also a member of this board, had charge of the collegiate discipline of the "School" six years, until 1707, and graduated from Harvard in 1668. His successor, Samuel Andrew, took his Harvard diploma in 1675, remained at college a number of years, was a Fellow of the Corporation, and during two vacancies in the presidency was obliged to fill most of the duties of that position. Rev. Timothy Cutler, who became Rector in 1719, graduated from Harvard in 1701, the year Yale officially began. Elisha Williams, who took the office from the hands of the trustees in 1725, belonged to the Harvard class of 1711. Thomas Clap, Yale's first President, was a graduate of Harvard in the class of 1722. (See *Yale Biographies and Annals*, B. F. Dexter, vol. i.)

¹ Jonathan Dickinson and Aaron Burr, Princeton's earliest Presidents, were both graduates of Yale, the one in 1706, the latter in 1735, and the Rev. Caleb Smith, of the Yale class of 1743, pastor of the church at New-ark Mountains, figures conspicuously in the early history of the new college. Dickinson and Burr were students at Yale when the leading-strings of Harvard were its only guidance. Dickinson received his diploma from Pierson, the first Rector. Burr was graduated during the thirteen-year administration of Elisha Williams. Caleb Smith had felt the impulses of the awakening of the Reformatory Policy of Rector Clap. But anything like a distinct program of study for the New Haven college had not yet appeared, and it is safe to say that any educational theories that the foundation of Princeton might possess were shaped and fashioned for their use by the practice and policy of Harvard as interpreted on the banks of the Connecticut.

Ontology, Cicero and the Hebrew Grammar, "And besides these things we dispute once every week after the syllogistic method and now and then we learn Geography."¹

Even at Yale and at Harvard, reflections of the scientific activities in England cause the addition of certain apparatus and, in 1734, it is recorded by Professor Dexter that "A valuable gift was received at Yale from Joseph Thompson, Esq., of London, (who had given some valuable mathematical books in 1730), being a complete set of surveying instru-

¹ The loss of the minutes of the faculty makes it impossible to present in detail the curriculum and methods of instruction. But we are fortunate in possessing letters of Joseph Shippen, of Philadelphia, the son of Judge Edward Shippen, a trustee of the college, which give us a vivid picture of the life of a student. In 1750 he was a member of the Freshmen Class. In a letter to his father, written in French, he says:

"But I must give you an account of my studies. At the present time, at 7 in the morning we recite to the President lessons in the works of Xenophon in Greek and in Watt's Ontology. The rest of the morning, until dinner-time, we study Cicero de Oratore and the Hebrew Grammar and recite our lessons to Mr. Sherman, the college tutor. The remaining part of the day we spend in the study of Xenophon and Ontology to recite the next morning. And besides these things we dispute once every week after the syllogistic method; and now and then we learn Geography."

Two months later he requests his father to send him "Tully's Orations," which, he adds, "I shall have occasion to use immediately."

In a letter of May 12th, 1750, he says:

"I believe I shall not want any more books until I come to Philadelphia, when I can bring them with me, which will be Gordon's Geographical Grammar and (it may be) Watt's Astronomy, and a book or two of Logic. We have to-day a lesson on the globes. As I have but little time but what I must employ in my studies, I cannot enlarge, otherwise I would give you some account of our college, as to the constitution, method, and customs, but must leave that till I see you."

On the first of June he writes:

"I shall learn Horace in a little while . . . but my time is filled up in studying Virgil, Greek Testament, and Rhetoric, so that I have no time handy to look over any French or Algebra, or any English book for my improvement. However, I shall accomplish it soon. The President tells our class that we must go into logic this week, and I shall have occasion for Watt's book of Logic."

Astronomy was studied with the aid of a text-book and the orrery constructed by David Rittenhouse. The text-book in natural philosophy was a book in two volumes. Its author was Benjamin Martin; entitled, "Philosophia Brittannica, a new and Comprehensive System of the Newtonian Philosophy, Astronomy, Geography, with notes."

ments, valued at 21 pounds and a reflecting telescope, a microscope, a barometer. Other mathematical instruments, valued at 37 pounds, were bought by a subscription from the trustees and others.¹

But the prize for culture and attainment did not, however, rest with the mathematics. President Stiles, in his diary writes of President Burr:

✓ "He was a small man as to body, but of a great and well improved mind. He was a hard student, a good classical scholar in the three learned tongues: was well studied in Logick, Rhetoric, Natural and Moral Philosophy, the belles Lettres, History, Divinity, and Politics."—as if these were the chief marks of scholarship.²

Rector Williams is praised for having cultivated among the students "a taste for useful and polite literature,"³ and his character and life are declared to furnish "a beautiful illustration of the times in which he lived."

"The sons of the Pilgrims were then laying the broad foundations of a future empire: and in their pursuits and extended range of thoughts and occupations, they were rather governed by their anticipations of the future, than by present circumstances. Talents and not money became the current circulations, and were sought for and cherished wherever discovered. In the constant changes going on in new colonies, educated men could not confine themselves to single branches, but were obliged to learn everything that might conduce to present security or future prosperity."⁴

¹ (Dexter's *Annals*, vol. i, p. 521.)

It is also recorded at this time that the whole number of undergraduates in attendance was over eighty.

Dexter's *Annals*, vol. i, p. 522.

² Quoted by Dexter's *Annals*, vol. i, p. 532.

³ (Baldwin's *Annals of Yale College*, p. 44.)

His influence may be traced in the work of Eleazer Wheelock, President and founder of Dartmouth, and Rev. Aaron Burr, President of Princeton. Thomas Clap, in his history of Yale College,¹ when summing up the career of Rector Williams, says: "He was furnished with most Parts and Kinds of academical literature."

⁴ (Baldwin, page 49.)

¹ (Clap's *Hist. of Yale College*, p. 39.)

Yet even with the impetus thus started toward a broad and liberal conception of what a college graduate ought to be and how the Institution of which he formed a part should be governed, we find Williams' successor in the Rectorship at Yale;¹ when giving his attention early in his administration to a codification of the laws and customs of the college, preparing them "partly out of the ancient laws and statutes of this college, partly from the principles and most important customs which had obtained, partly from the laws of Harvard College and partly from the statutes of the University of Oxford; and some few new ones," and so merely reproducing, in a somewhat extended form, the scheme of study we have already examined.²

¹ Thomas Clap.

² Clap's *History*, p. 42.

Dexter's *Annals*, vol. ii, p. 5, par. 3 to p. 6, chap. iv.

"That the President and Each of the Tutors Shall, according to the best of their Discretion, Instruct and bring forward their respective Classes in the Knowledge of the three Learned Languages, and in the Liberal Arts and Sciences. In the first Year They Shall principally Study the Tongues and Logic, and Shall in Some measure pursue the Study of the Tongues the Two next Years. In the Second Year they Shall Recite Rhetoric, Geometry, and Geography. In the Third Year, Natural Philosophy, Astronomy, and other Parts of the Mathematicks. In the Fourth Year, Metaphysics and Ethics. And the Respective Classes Shall Recite Such Books, and in Such a manner as has been accustomed, or Such as the President, upon the Consultation with the Tutors, Shall think proper; but every Saturday Shall be allotted to the Study of Divinity, and the Classes Shall, during the whole term, recite the Westminster Confession of Faith received and approved by the churches in this Colony—Wolfebius, Ames Medulla, or any other System of Divinity—by the Direction of the President and Fellows; and on Friday Each Undergraduate, in his order, about Six at a Time, Shall Declaim in the Hall in Latin, Greek or Hebrew, and in no other Language without Special leave from the President; and shall presently after Deliver up his Declamation to his Tutor, fairly written and Subscribed. And the Two Senior Classes Shall Dispute in the Hall Twice a week, and if any Undergraduate Shall be absent from the Reciting or Disputing without Sufficient Reason, He Shall be fined two Pence, and from Declaiming, Six Pence.

"4. That if any student Shall be notoriously negligent in attending upon or Shall Slightly or carelessly Perform his public Exercises as aforesaid, he Shall be punished by Fine, Admonition, Degradation or Expulsion, as the Nature and Degree of the Offence may Require.

"5. That the Senior Sophisters Shall continue in their Rescitations and

Yet by the increase of the force of Tutors to three the

other public exercises until the 15th day of July at least annually, and then They Shall not Depart without Leave from the President, nor untill they have completed their Theses and other Such Preparations for the Commencement.

"6. That about the 15th of July annually, on Such a Day as the President Shall appoint, the Senior-Sophisters Shall Sit Two or more hours in the Hall to be publicly examined by the President, or either of the Fellows or Tutors, or any other Gentlemen of Liberal Education, touching their Knowledge in the Liberal Arts and Sciences or any other Qualifications for their expected Degree.

"7. That all Resident Masters and Bachelors Shall constantly attend Prayers or Lectures or other Public Discourses in the Hall, upon penalty of having the Privilege of the Library taken from them.

"8. That all Resident Bachelors Shall Dispute in the Hall, under the President, once a week or Fortnight, as the President Shall appoint, upon Penalty of Four Pence for every Neglect without Sufficient Reason.

"9. The President may Order and Direct the Resident Bachelors or Undergraduates to make Analysis in the Hall or any other Scholastic Exercises upon Suitable Subjects for their Tryal and Exercise of their Skill and Learning.

"10. That every Student in this College Shall in his ordinary Discourse Speak in the Latin Tongue; and the President and Tutors may, at their Discretion, enjoyn the Observation of this Law by some proper and reasonable Penalties."

(Dexter's *Annals*, vol. ii, pp. 14-15.)

CHAP. IX.

OF COMMENCEMENT (?), DEGREES AND VACATIONS.

"1. All Such Scholars as have resided at College Four Years and have diligently attended their Studies and all public Instructions, and upon the Examination appointed by the President Shall be found to be well Skilled in Latin, Greek, Logic, Mathematics, Natural and Moral Philosophy, and other ordinary Scholastic Learning, and hath been Guilty of no Disorder, Misdemeanor, or any Breach of the College Laws, but Such as hath made Satisfaction for, may, by the Favour of the President & Fellows, expect to be admitted to the first Degree, viz., Bachelor of Arts.

"2. All Such as have for the Space of three years after the first Degree prosecuted their studies, and have been Guilty of no Crime or Misdemeanor, may expect the Favour and Honour of a Second Degree, viz., Master of Arts.

"3. Everyone who Expects a Second Degree Shall Come a Convenient Time before Commencement and exhibit a common Place or Some Treatise or Discourse in the Hall, or Sermon in the Meeting-house, to Evidence his Proficiency in Learning.

"4. Every Candidate for a Second Degree Shall Signifie his Desire of it to the President one Month at Least before the Commencement; and

instruction at Yale now took on a more systematic character. The President gave instruction to the Senior Class; the others were each in the hands of one tutor. There were no funds available at Yale to establish Professorships, but the need for at least one such officer was strongly felt. The tendency of the curriculum was still toward divinity and, in October, 1753, the General Assembly of Connecticut resolved: "That one principal end proposed in erecting the college was to supply the churches in this Colony with a learned, pious and orthodox Ministry; to which end it was requisite that the ~~students~~ in the College have the best instruction in Divinity and the best pattern of preaching set before them, and that an orthodox Professor of Divinity in the College would greatly tend to promote that good end and design: And therefore recommended a general contribution to be made in all the religious localities in the Colony for that purpose. The College being in danger of being infected with errors, the Corporation desired the President to undertake and carry on the work of Professor of Divinity."¹

"The Assembly's Catechism, Ames' Medulla and Cases of

Shall also personally attend it; and if in any instance the President & Fellows should by a special Favour allow any absent Person a Degree, it shall be upon his paying into the College Treasury Such a Sum of Money as the President & Fellows See Cause.

"5. Every One who takes a Degree Shall pay to the President Eight Shillings and Six Pence for it.

"6. No Scholar Shall be permitted to Take a Degree unless the Steward Shall certifie that he hath paid all his college dues; nor unles he Shall pay all his Just Debts in the Town of New Haven, provided the Complaint be made to the President ten Days before the Commencement.

"7. That on the commencement Day the President Shall preside in the public Acts, and Begin & End the Solemnity with Prayer; and in the Forenoon one of the Bachelors Shall make an Oration, & the rest Shall Dispute. The like Shall be done by the Masters in the Afternoon."

¹ (Clap, *Hist.*, pp. 60-61.)

It had already been voted by the Corporation in 1746 "That they would choose a public Professor of Divinity in the College as soon as they could procure a sufficient support." and (Baldwin's *Hist.*, p. 66) in 1752 one-half of the lease of the College lands in the County of Litchfield had been set aside for this purpose. (Baldwin, p. 67.)

Conscience" were ordered to be taught and the President and fellows urged "That special care should be taken in the education of students, not to suffer them to be instructed in any different principles or doctrines; and that all proper measures should be taken to promote the powers and purity of religion and the best edification and peace of these churches."

Wise were the founders of Harvard that they took the precaution to establish their young Seminary "remote from controversy." Fervent were the prayers of these Connecticut clergymen—"Lead us not into temptation, but deliver us from evil!"

The Lux that they had prefixed to the "Veritas" and so formed their motto hardly revealed in kindly fashion the difficulties of their journey, and amid the encircling gloom of denominational strife the horrid shapes of "false doctrine, heresy and schism" seemed, like the spectre of the Brocken, doubly fearful and terrible. Against these foes they armed themselves, and all who might teach in the college, with a Confession of Faith as contained in the Westminster Catechism and the Saybrook Platform. The Professorship of Divinity was filled in 1755 by the appointment of the Rev. Naphthali Daggett, of the class of 1748.¹

¹ (Baldwin, p. 73.)

Professor Dexter says, vol. ii, p. 322: "The steps thus taken were unprecedented in this country;" and in a foot-note adds: "In Harvard College no similar tests were ever exacted of the officers." But in the establishment of their Hollis Professorship in 1722 the Harvard Corporation secured from Professor Wigglesworth something very like that with which Yale in 1753 bound all her future faculty.

Quincy states, in his *History of Harvard*, vol. i, p. 255, quoting directly from the records of the overseers, 24th of January, 1722: "They wanted not merely a general examination into the soundness and orthodoxy of the candidate, but a special statement of their construction of those terms for the guidance of future times. Therefore, at their meeting on the 24th of January, 1722, the day after the meeting of the Corporation, when the President of the College reported their choice of Mr. Wigglesworth for confirmation, stating that preceding the choice they had examined him upon several important heads of Divinity, the Overseers, first approving that examination, and then confirming Mr. Wigglesworth, immediately

But from the preference of President Clap for scientific pursuits we may infer that the curriculum at Yale, at this period, received a marked impetus in this direction. Yet divinity was still the chief corner-stone of the educational edifice, buttressed and supported by the remainder of the curriculum, but specially by Hebrew and Disputation in the Forensic and Syllogistic manner.¹

caused the following order to be entered upon their records, under the head of 'Professor Wigglesworth's Creed':

"Ordered by the Overseers, that a minute be taken and recorded of the several heads in divinity upon which the Corporation examined Mr. Wigglesworth, viz.: that he appeared before the Corporation and declared his assent—

"1. To Dr. Ames' *Medulla Theologiai*.

"2. To the Confession of Faith contained in the Assembly's Catechism.

"3. To the Doctrinal articles of the Church of England.

"More particularly—

"1. To the doctrine of the Holy Trinity.

"2. To the doctrine of the eternal Godhead of the blessed Savior.

"3. To the doctrine of Predestination.

"4. To the doctrine of special efficacious grace.

"5. To the divine right of infant baptism.

"By thus enumerating all the particular points on which Mr. Wigglesworth had been examined, including the divine right of infant baptism, the Overseers unquestionably intended to fix, by contemporaneous constructions, the meaning of the terms 'sound and orthodox.'"

Only that the Yale law was more inclusive, I fail to see how it differed materially from the previous act of Harvard. Its purpose was the same—to restrict the teaching force to members of the orthodox communion. In the one case it was the Baptists who were feared; in the other it was the Episcopalians who were legislated against.

¹ Professor Dexter speaks of the visit of Benjamin Franklin to the institution in 1756 as the friend of President Clap, and that "he had presented the college some years before with his electrical apparatus, besides a number of valuable books for the library."

(Dexter, vol. ii, p. 356.)

Baldwin quotes (page 88) from Dr. Douglass' "Historical and Political Summary of New England."

"President Clap is an ingenious gentleman mathematically learned; at this time, 1750, contriving some compendiums, and other improvements in astronomical calculations. Many of the students are expert in astronomical calculations, from the solid good tuition and instruction of the worthy Mr. Clap."

The same author quotes from Dr. Holmes in his "American Annals" (vol. ii, p. 281).

President Clap "was a man of extensive and profound learning. In

Of the course at Harvard at this time, in addition to the

Mathematics and Natural Philosophy he was surpassed by few, if any, of his contemporaries in this country. He constructed the first orrery, or planetarium, made in America."

Baldwin, page 88.

Dr. Stiles writes of him (Appendix to *Holmes' Life*, quoted by Baldwin, pp. 92-94) :

"President Clap was possessed of strong mental powers, clear perception and solid judgment. Though not eminent for classical learning, he had a complete knowledge of the three learned languages. He was well versed in algebra, optics, astronomy, and the general courses of experimental philosophy. In Mathematics and Natural Philosophy, I have no reason to think he was equalled by any man in America, except the most learned Professor Winthrop. Many others, indeed, excelled him in the mechanic application of the lower branches of the mathematics; but he rose to sublimer heights, and became conversant in the application of this noble science to those extensive laws of nature which regulate the most stupendous phenomena and obtain throughout the stellar universe. I have known him to elucidate so many of the abstrusest theorems and ratiocinia of Newton, that I doubt not the whole *PRINCIPIA* of that illustrious philosopher was comprehended by him; a comprehension which, it is presumed, very few mathematicians of the present age have attained. Wollaston's *Religion of Nature* was the basis of his moral philosophy, and Westminster Calvinism was his theology. He had thoroughly studied the Scriptures and read the most eminent divines of the last two hundred years. In his peculiar manner he had examined so many authors through the tract of time, from Jerome to the present day, as well as the three more primitive ages, that, on the fundamental doctrines of religion, I believe him to have been possessed of the sentiments of the whole Christian world. History, ancient and modern, political and ecclesiastical, he was well versed in. He had deeply studied the history of the Assyrian empire; that of Greece; that of the Roman empire, through all its periods, and particularly its mutation into an Ecclesiastical State. He studied the rise of Mohamedanism; the Saracenic conquests; the dominion of the Caliphs and Mamelukes; the extensive spread of this religion, and the final partition of the interest into several empires. He had formed an idea of the powers of Europe, their connexions, balances and leading springs of policy; and had arranged the principal events and revolutions of the several ages, from antiquity to the present day. He traced and considered, with the closest attention, the causes of greatest extent, and most forceful operation, in effecting public events, which, like the laws of nature, carry in themselves the certain futurity of their phenomena. He well understood the history and geography of the Bible; and took great pains to consider the verification which it naturally gave and received when compared with profane history. He was well read in the fathers, and had examined all the remains of the antiquities of the primitive church. He studied the police, worship and discipline of the church, in the three first

Records of College Faculty (Vol. I, p. 178). under date March 2, 1742-3¹ where it is "Agreed that beside the Classics and Greek Testament usually recited at College the books here following shall also be henceforth recited: Compendium Logic extracted from Le Grand, Locke on Human Understanding, Goodwin's Geographical Grammar, Euclid's Elements, Gravesend's Natural Philosophy, Dr. Watt's Astronomy," we have valuable testimony from the pens of two of its graduates, secured by Professor Benjamin Pierce while compiling his history of the institution. One of these gentlemen was Hon. Paine Wingate of the class of 1759. The other, Dr. E. A. Holyoke, of the class of 1746, reported with the conciseness of a medical prescription:

and two last ages. He greatly studied the councils, general and provincial, and in them was thoroughly versed. He was considerably read in the common law of England, and in the municipal laws of his country. He was so well versed in the Jus Civile, the Institutes of Justinian, the Pandects, the Novellæ; and from the canons, the decretals of the Popes, he had obtained such a general knowledge of ecclesiastical law that he would have honored a Doctorate in both laws."

"The labors of his office left a most contemplative mind but a few hours for reading. But he had a happy and advantageous method of reading; he always studied on a system, or arrangement with respect to some whole, and read to purpose. A voluminous library before him he treated as a collection of report books delivering the knowledge and reasonings of the learned world on all subjects of literature. He seldom read a volume through in course. Having previously settled in his mind the subjects to be examined, and what on any subject he needed to ascertain, he then pitched directly on the book or books, and those parts in them which would elucidate the subject of his inquiry. He would thus with discernment and dispatch run over fifty volumes, if necessary, and select whatever they contained in point; and thus proceed until he had made himself master of the subject, generally passing unconcerned over the rest, however attractive and interesting. He thus amassed and digested a valuable treasure of erudition, having prosecuted almost all the variety of capital subjects in the whole circle of literature."

Surely our course of theological instruction has developed into something most comprehensive.

¹ It was at a little earlier date than either of these (1740) that Samuel Adams argued on Commencement the affirmative of the question, "Whether it be lawful to resist the Supreme Magistrate if the Commonwealth cannot otherwise be preserved."

- " 1. Latin Text Books—Virgil—Cicero.
Orations, De Officiis—Brattles Logic.
Wollebius. Reading Greek into Latin.
2. Greek Text Books—Greek Testament.
3. Geography and Astronomy. Wards Mathematics.
Gordon's Geographical Grammar.
Gravesande's Philosophy, Euclids Geometry.
4. Watts Logic, Locke on the Understanding.
No exercise in English Composition.

Four tutors carried their classes through and gave them all the instruction they received. Two Professors, (1) of Divinity, and (2) of Mathematics read lectures. The President expounded the Scriptures at evening prayers twice each week."

Wingate's letter runs as follows:

"Tully's offices and Wollebius we did not study when I was in College. And the construing Greek into Latin would apply to the New Testament and that only. I do not recollect anything else mentioned by Dr. Holyoke that we did not study in my day and several other subjects not mentioned by him we did study. With Professor Winthrop we went through a course in the Mathematics generally and did not finish our studies with him until we had done reciting. With Dr. Wigglesworth we attended his Theological lectures, both in the chapel for all the students and in the hall to the two senior Classes. His lectures to the two Senior Classes in the College Hall were confined to the subjects of thirty-nine articles of the Church of England.¹

"As to our recitations beside those I have mentioned to you,

¹ "In those lectures the Professor did not take a text of Scripture, but took some particular article of that creed and discoursed from it. His lecture was very short. He had no prayer nor any other service. I remember in the course of his lectures he came across that article which led him to consider the infallibility of the Church of Rome.

"The Dr. had very excellent talent for satire; and he observed that he now had come to that article which led him to expose the absurdity of the pretense of the church of Rome to infallibility. That this was so ridiculous a pretense it did not deserve a serious refutation. We should accordingly treat it with ridicule. And the Dr. accordingly did go on with such a series of ridicule as diverted his audience very much, as they did not need strong arguments to convince them of the justice of his sentiments."

with the two Professors and on attending to the Hebrew instructor, our instruction was received altogether from one Tutor confined to each class. Each class had nothing to do with any tutor but its own. We recited three times in the day. Once immediately after attending prayers in the morning and then at eleven o'clock and at 4 o'clock p. m. The whole class was not so large in my day but they could all attend at once in the tutor's¹ chamber. The tutors in general did very little more

¹ This tutorial system had been brought over directly from the parent college in Cambridge, and in its simplest form meant one teacher for each class. As the class entered in the special charge of one tutor, so it continued under his guidance for the period of undergraduate study, and at the time of graduation he collected all the fees. The University of Edinburgh was the first of the British colleges to do away with this feature of academic management and to provide "specializing professors." (Grant's *Hist. of U. of E.*)

In America the College of William and Mary was the first institution to dignify by this title the members of its teaching force. Their charter, granted in 1693, did not become operative until this act was accomplished and its friends were forced into meeting the condition, probably through the wisdom of the first President, James Blair, who was acquainted with the educational movement in Scotland. But at Harvard and at Yale the professorial title was only introduced as distinct endowment for this purpose was received.

The Hollis Professorship of Divinity was established 14 February, 1721, and on the 28th of the following June, Edward Wigglesworth was elected to the chair. (It was fully two years before the matter was entirely settled, but the above is the date at which Quincy places the actual beginning of the establishment.) Quincy, vol. i, pp. 239, 243.

See Quincy, vol. i, p. 260.

The Professorship of Mathematics and Natural Philosophy was established early in April, 1726, by the transmission on the part of Mr. Hollis of 1,200 pounds sterling, and on 12th of May, 1727, Isaac Greenwood was elected to the chair. (See Quincy, vol. ii, p. 11, 19.)

It was but natural that the earliest professorship in Harvard College should have been that of Divinity, though it was a singular circumstance that the endowment for its maintenance should have come from a member of that sect whose most distinguished apostle was banished from the colony the year the college was founded, and against whose fundamental doctrines the officers of the institution felt compelled to wage a conscientious war.

In another of the letters Mr. Wingate speaks more particularly of Mr. Monis and the course in Hebrew. Mr. Monis held the office of Hebrew instructor from 1722 until 1761, when, on the death of his wife, he resigned his office. He seems to have fulfilled the duties of the position to the satisfaction of everybody, and in the course of his career to have pub-

than hear us recite the lessons he assigned to us. The lesson

lished what is probably our first American college text-book, a Hebrew grammar bearing date of 1734. Wingate says of him: "He attended to the instruction of the scholars one afternoon in the week, but none were compelled to attend who did not choose to learn Hebrew, and but a small portion of the scholars paid any attention to his instruction, as a correct reading of Hebrew, according to Mr. Monis' rule of pronunciation, required considerable time and study; his successor, Professor Sewell, prepared a grammar, in which he omitted the use of the vowels, which materially altered the pronunciation of the language, but which he thought of no importance, as the Hebrew was now become a dead language."

At the time that Mr. Wingate was in college Hebrew seems to have become well-nigh what was afterwards known as an elective study. Possibly a beginning of this state of things is to be found in the vote recorded in College Book 4, p. 95, under date of August 11, 1724, where there is a substantial modification of the previous Hebrew legislation.

It cannot be said, however, that Monis was the sole impartor of Hebraic knowledge, for there had been maintained a custom of reading by the students in the hall or in the tutors' chambers the Old and the New Testaments in their original languages.

Thus in College Book 4, p. 17, Dec. 5, 1698, it is stated: "That so the worship of God may be upheld in the College with the greater solemnity and that the scholars may be better acquainted with the original Language in which the Holy Scriptures are written, it is hereby ordered that prayer, with the reading of Scriptures, shall be constantly attended morning and evening in the College Hall, and that when there is a President or a Vice-President residing in the place, he shall as often as will consent with his other work, expound the Scriptures to the Scholars, and that instead of the reading by the scholars formerly used in the College Hall at the time of worship, it shall from henceforward be part of the work of the Tutors to hear their pupils read every morning out of English into Hebrew and in the afternoon out of English into Greek a chapter, or so much of it as their Tutors shall think convenient, and that they shall take care that their pupils perform their reading with due exactness and not perfunctorily."

Also, in College Book 4, p. 31, Jan. 26, 1707, shortly after the advent of President Leverett: "Whereas the ancient and laudable practice for the undergraduates to read the Sacred Scriptures of the New Testament out of English or Latin into Greek before evening prayers in the College Hall hath been for some years last past discontinued. It is declared and enacted by the President and Fellows of Harvard College, and that the said ancient and laudable practice and usage be revived, and that from and after the publication hereof the Undergraduates are hereby ordered and obliged to read the Sacred Scriptures of the New Testament before the Evening prayers in Greek out of the English or Latin Translation when and so often as the President shall personally perform the Evening Service in the College Hall. Pres. Leverett's *Letter Book*, H. U. A. I., pp. 6, 25.

was commonly a very easy task, and, if the scholar made himself master of that, all the requirements of him were answered. There would always be some idle, negligent pupils. The idle and stupid would sometimes be punished for negligence; but this was always thought disgraceful and there were but few in the class who would incur that disgrace. Most of those who were so idle as not to study their recitations would absent themselves from their tutor's chamber, and if they could not invent a sufficient excuse would incur the penalty of a small fine."

Dr. Holyoke's letter, when compared with the statement of President Clap of Yale, made at the close of his administration,¹ reveals the growing importance of mathematical and physical science in the curriculum. Clap says: "Many of them (i. e., the junior students) understand surveying, navi-

¹"In the first year they learn Hebrew, and principally pursue the study of the languages, and make a beginning in logic and some parts of the mathematics. In the second year they study the languages; but principally recite logic, rhetoric, oratory, geography and natural philosophy; and some of them make good proficiency in trigonometry and algebra. In the third year they still pursue the study of natural philosophy, and most branches of mathematics. Many of them understand surveying, navigation, and the calculation of eclipses; and some of them are considerably proficient in conic sections and fluxions. In the fourth year they principally study and recite metaphysics, ethics and divinity. The two upper classes exercise their powers in disputing, every Monday in the syllogistic form and every Tuesday in forensic.

"The President frequently makes public dissertations upon every subject necessary to be understood to qualify young gentlemen for various stations and employments, such as the nature of civil government, the Civil Constitution of Great Britain, the various kinds of courts, the several forms of ecclesiastical government which have obtained in the Christian Church."

(Yet it was in 1760 that Lewis Morris, of Morrisania, father of Gouverneur Morris, made his will and quaintly stated: "It is my desire that my son, Gouverneur Morris, may have the best education that is to be had in England or America, but my express will and Directions are that he be never sent for that purpose to the Colony of Connecticut—least he should imbibe in his youth that low craft and cunning so incident to the people of that country, which is so interwoven in their constitutions that all their art cannot disguise it from the world, tho' many of them, under that sanctified Garb of Religion, have endeavored to empose themselves on the world for honest men." Quoted in *Williams and Mary College Quarterly*, vol. viii, p. 83.)

gation, and the calculation of eclipses; and some of them are considerably proficient in conic sections and fluxions." "Geography and natural philosophy" are studied by the sophomores; "and some of them make good proficiency in Trigonometry and Algebra;" though Professor Goodrich, in his life of John Trumbull, states (p. 13) that the study of Algebra was not introduced until 1763 by the tutors. The exact year is of little importance, the fact remains that by the middle of the eighteenth century the curriculum of the Colonial College had begun to shape itself along broader lines than those of a mere preparation for the ministerial office. The opening of the country to survey and settlement gave a practical bearing to the study of the advanced mathematics, and the growing interest in East India trade made navigation of commercial importance.

At Harvard, apparatus for Physical and Astronomical work begins to be collected. There is found also the mention of "Chymistry." In Harvard Coll. Book VII., p. 183, Sept. 30, 1760, it is

Voted: "That thanks of this Corporation be given to the Hon. James Bowdoin for his generous donation of an Orrery to the Apparatus of Harvard College," and an expedition is sent to New Foundland to observe the Transit of Venus, "Which," as Jeremy Belknap quaintly puts it in his diary, "was never seen before by mortal eyes but once."¹

¹ This diary, which is kept in interleaved almanacs, goes on to state, under Oct., 1761: "Latter end of the month A great Bustle about learning Wollebius ends in a compliance with Gov. Hutchinson's Desire and not of ye Corporation Council." Dr. Belknap does not give us, in this diary, all that we would expect from a person of his known habits of mind, yet the following items do throw some light on the course of study:

"Jan. 17, 1759. Borrowed Clarks Martyrology of Mr. Pecker; returned.

"Some time this month Bought Buxton's Lexicon at Mr. Condys, 29. Returned ye 1st. Volume of the Spectator to Mr. Morton and borrowed the second.

"Feb. 24, Bought, at Boston, Watts Improvement of the Mind for 3 pounds.

"Feb. 26, 1760. Disputing Question: Potestas creandi est incomunicabiles nulli cocatura.

At Yale, the next Professorship to be established in the College, in 1771, was that of Mathematics and Philosophy, and in the life of Dr. Dwight, by his son, it is stated, that, at Yale, he carried his mathematical class "as far as any of them would go in the principia of Newton," but, President Woolsey adds:

"This, however, must have been a very rare thing."¹

"March 17, 1760. This day our class finished Euclid, and on the 18th began Locke's Essay.

"May 13, 1762. Mr. Winthrop began his experimental Philosophy Lectures in ye Apparatus Chamber."

(From Diary of Jeremy Belknap in the *Mass. Hist. Loc. Coll.*)

¹ "The first mathematical work of which I can find trace was Ward's Mathematics, which contains a meagre collection of the most elementary propositions in geometry and in conic sections. Rohault's, and in President Clap's time, Martin's Philosophy, in three volumes, was the text book for the science. When this work came to be out of print, President Stiles, by advice of Dr. Price, procured Enfield's Philosophy to be imported, and made use of it, which was the first introduction of that now obsolete text book into the American Colleges.

"In the earliest times of the College it seems that a manuscript text-book of natural philosophy was prepared by Rector Pierson, which the students were expected to copy. Perhaps, also, the first text-books in logic were manuscript before either Ramus or Burgerdicius were used: on ethics, a treatise was written by President Clap, which served the purpose of the college for a considerable time. The Latin authors studied in College were chiefly Virgil, Horace and Cicero de Oratore. No Greek beyond the New Testament is known to have been taught to the classes in regular course until after the present (*i. e.*, 19th) century began."

(President Woolsey's 150th Anniversary Discourse, pp. 61, 62.)

Baldwin places the cause of the scholastic greatness of Yale not with any of the occupants of the executive chair, but with the tutors, and it seems certain that they were at this time in many ways a remarkable association of intellectual power and worth. Professor Goodridge says of Mr. Joseph Howe, appointed in 1769:

"Besides the usual Collegiate studies, he employed the class under his immediate care in English compositions, instructed them in the beauties of style, and exercised them frequently in public declamations."

(Goodridge, *Life of Trumbull*, p. 14.)

"In September, 1771, all the tutors except Mr. Howe resigned the office. Messrs. Trumbull and Dwight were chosen to supply the vacancies. From this period every effort was unanimously made to cultivate in the seminary a correct style and elocution."

(Goodridge, p. 14.)

As the result of this unofficial instruction on the part of these gentle-

These subjects, and also English and the Modern Languages (in the form of French), were all looked upon as subsidiary to the main purpose of the college instruction, and, in the three institutions we have thus far considered, the chief and highest place was given to the study of Divinity. Here and there an individual instructor might exploit a favorite subject, but the main line of instruction in Harvard, Yale and Princeton is identical.

There seems to have been no query as to the efficiency of the method nor any reason to doubt that the scheme of studies, the order and arrangement of them, was the very best possible, that everything included in the course was there by right and that nothing had been omitted.

The final formal statement of the scheme is made at the hands of President Findley of Princeton, in 1764, the year Brown was founded, and gives us the same preponderance of the languages during the freshman year, and of disputations, in the senior year. There is the same reading from "the original" at prayers, and while regret is expressed over the *decline* of the Hebrew, the language still has place in the curriculum. Save that the students are divided into four classes, and that Arithmetic is required for entrance, the scheme in Princeton in 1764 has little to offer, as a means of culture and of training for the general student that has not already been included in the Laws and Orders of Harvard as

men, we have a petition presented to the Corporation in October, 1776, to this effect:

"Upon application made to this board by Mr. Dwight, one of the tutors, at the decree of the present senior class, requesting that they might be permitted to hire the said Mr. Dwight to instruct them the current year in rhetoric, history and the belles lettres, upon considering the motion, the corporation being willing to encourage the improvement of the youth in those branches of polite literature, do comply with their request, providing it may be done with the approbation of the parents or guardians of the class."

(*Kingsley's History*, vol. i, p. 99.)

Kingsley adds "that Mr. Dwight at this time gave a course of lectures on style and composition similar in plan to the lectures of Blair, which had not then come before the public." (Vol. i, p. 99.)

prepared by President Dunster in 1642. The Cambridge curriculum is having its perfect work. Pure and unmixed it was received. In this manner it was transmitted. It was only the disruption of the Revolutionary War, and the readjustment necessarily following, which led to its decadence and replacement, in these colleges, by something more comprehensive and better fitted to train for citizenship, a purpose wholly different from the ideal that governed colonial Princeton, Harvard and Yale.

CHAPTER III

THE NEW TENDENCY

ALREADY indications of the new tendency had begun to be seen. The Advertisement,¹ that Kings College in 1754, had

¹ "ADVERTISEMENT.

May 31. 1754.

"To such Parents as have now (or expect to have) Children prepared to be educated in the College of New York.

"I. As the Gentlemen who are appointed by the Assembly, to the Trustees of the intended Seminary of College of *New York*, have thought fit to appoint me to take the Charge of it, and have concluded to set up a Course of Tuition in the learned Languages, and in the liberal Arts and Sciences: They have judged it advisable that I should publish this *Advertisement*, to inform such as have Children ready for a College Education that it is proposed to begin Tuition upon the first day of *July* next, at the *Vestry Room* in the new *School-House*, adjoining to *Trinity Church* in *New York*, which the Gentlemen of the Vestry are so good as to favour them with the Use of it in the Interim, till a convenient Place may be built.

"II. The lowest Qualifications they have judged requisite, in order to Admission into the said College, are as follows, viz.: That they be able to read well and write a good legible Hand; and that they be well versed in the Five first Rules in Arithmetic, *i. e.*, as far as *Division* and *Reduction*; and as to *Latin* and *Greek*: That they have a good Knowledge of the Grammars, and be able to make grammatical *Latin*, and, both in construing and parsing, to give a good Account of two or three of the first select Orations of *Tully*, and of the first Books of *Virgil's Aeneid*, and some of the first Chapters of the *Gospels of St. John*, in *Greek*. In these Books, therefore, they may expect to be examined: but higher Qualifications must hereafter be expected: and if there be any of the higher Classes in any College, or under private Instruction, that incline to come hither, they may expect Admission to proportionably higher Classes here.

"III. And that People may be the better satisfied in sending their Children for Education to this College, it is to be understood that, as to Religion, there is no Intention to impose on the Scholars the peculiar Tenets of any particular Sect of Christians: but to inculcate upon their tender Minds the great Principles of Christianity and Morality in which true Christians of each Denomination are generally agreed. And as to the daily Worship in the College Morning and Evening, it is proposed that it should, uniformly, consist of such a Collection of Lessons, Prayers and

presented as an introduction to its academic life, in the "New

Praises of the Liturgy of the Church as are, for the most Part, taken out of the Holy Scriptures, and such as are agreed on by the Trustees to be in the best Manner expressive of our common Christianity; and as to any peculiar Tenets, everyone is left to judge freely for himself, and to be required only to attend constantly at such Places of Worship, on the Lord's Day, as their Parents or Guardians shall think fit to order or permit.

"IV. The chief Thing that is aimed at in this College is to teach and engage the Children to *know God in Jesus Christ*, and to love and serve him, in all *Sobriety, Godliness, and Righteousness* of Life, with a *perfect Heart, and a willing Mind*; and to train them up in all virtuous Habits, and all such useful Knowledge as may render them creditable to their Families and Friends, Ornaments to their Country, and useful to the public Weal in their Generations. To which good Purposes it is earnestly desired that their Parents, Guardians and Masters would train them up from their Cradles, under strict Government, and in all Seriousness, Virtue and Industry, that they may be qualified to make orderly and tractable Members of this Society; and, above all, that in order hereunto, they be very careful themselves to set them good Examples of true Piety and Virtue in their own Conduct. For as Examples have a very powerful Influence over young Minds, and especially those of their Parents, in vain are they solicitous for a good Education for their Children if they themselves set before them Examples of Impiety and Profaneness, or of any sort of Vice whatsoever.

"V. And, lastly, a *serious, virtuous, and industrious* Course of Life being first provided for, it is further the Design of this College to instruct and perfect the Youth in the Learned Languages, and in the Arts of *reasoning* exactly, and *writing* correctly, and *speaking* eloquently; and in the Arts of *numbering* and *measuring*, of *Surveying* and *Navigation*, of *Geography* and *History*, of *Husbandry, Commerce* and *Government*, and in the Knowledge of *all Nature* in the *Heavens* above us, and in the *Air, Water, and Earth* around us, and in the various kinds of *Meteors, Stones, Mines, and Minerals, Plants and Animals*, and of every Thing *useful* for the Comfort, the Convenience and Elegance of Life, in the chief *Manufactures* relating to any of these Things; And, finally, to lead them from the Study of Nature to the Knowledge of themselves, and of the God of Nature, and their Duty to him, themselves and one another, and every Thing that can contribute to their true Happiness, both here and hereafter.

"Thus much, *Gentlemen*, it was thought proper to advertise you of, concerning the Nature and Design of this College: And I pray God, it may be attended with all the Success you can wish for the best Good of the rising Generations; to which (while I continue here) I shall willingly contribute my Endeavors to the Utmost of my Power.

"Who am, *Gentlemen*, Your real Friend And most humble Servant,
SAMUEL JOHNSON."

York Gazette" or "Weekly Post Boy," had suggested a most comprehensive scheme of studies, adding to the learned languages, (reasoning, writing, and speaking eloquently)—Surveying and Navigation, Geography, History, Husbandry, Commerce, Government, the Knowledge of All Nature in the Heavens above us and in the Air, Water and Earth around us, Meteors, Stones, Mines and Minerals, Plants and Animals, and of every Thing *useful* for the Comfort, the Convenience and Elegance of Life, in the chief Manufactures relating to any of these Things; and, finally, to lead them from the Study of Nature to the knowledge of themselves and of the God of Nature, and their Duty to Him, themselves and one another, and everything that can contribute to their true Happiness, both here and hereafter.

The Laws and Orders, which were adopted June, 1755, place Geography and Chronology among the studies of the Freshman year; "a small system of logic," "Mathematics and the Mathematical and Experimental Philosophy in all the several branches of it, with Agriculture and Merchandize, together with something of the classics and criticism all the while" during the second and third years, and the fourth year is devoted to the study of "Metaphysics, logic and Moral Philosophy with something of criticism and the Chief Principles of Law and Government, together with History, Sacred and Profane."

The "revision" that followed the change of Presidency at Kings, in 1762, seems to have kept the general lines of this program, though nothing is mentioned in this "Plan of Education"¹ save the classical books, logic, rhetoric, Meta-

¹ 1763.

PLAN OF EDUCATION.

First Year.

Salustii Historia—Caesaris Commentar.

Ovidii Metamor. & alia—Virgil Ecl.; Esop. Fab.; Gr. Lucian Dialog.; Test. Gr.—Grot. de Veritate; Latin & Greek Grammars to be consulted, or repeated, as often as shall be found necessary. Translations with Lat. & Eng.; Eng. & Lat. Themes.

N. B. Corn: Nep: & Select: e profan: if necessary.

physics and Disputes. Yet we know that the successor of the first professor of "Mathematics and Natural History" (the first chair created in this institution in 1757) was in office and was a graduate of the University of Glasgow; that the new president had been a Fellow of Queen's College, Oxford, and Mr. Leonard Cutting, the tutor, was of Pembroke Hall, Cambridge, a combination of influence sufficiently varied to prevent the methods of instruction from being narrow or circumscribed.

The ideal at the founding of Kings was expressed differently from what we observed at Harvard or at Yale.

"The chief Thing that is aimed at in this College is, to teach and engage the Children to *know God in Jesus Christ*, and to love and serve him, in all *Sobriety, Godliness, and Righteousness of Life*, with a perfect *Heart, and a willing*

Second Year.

Ciceron: Officia & alia—Quint: Curt; Terent: Com.—Ovidii Epistolae; Virgil Æneis & Georgica—Test. Gr. continued; Epictet. Enc.—Xen. Institutio Cyri. & Exped.; Farnab. Epig.

N. B. Latin & Gr. Gram. as before.

Wallisii Logica—Sanderson Comp.; Johnson Noetica; Rhetoric—Repetition to learn the Art of speaking.

Trans: into Lat. & Eng: continued.

Lat. Themes. Lat. & Eng: Verses.

Third Year.

Ciceron: Orationes—Cicero de Oratore: Quintil. Instit: Orat:—Plin: Epist: Catul: Tibul: Propert:—Horatii Opera; Aristot. Eth. & Poetic.—Platon: Dial: Xen: Mem.; Theoc. Idyl—Hom: II.; Compend. Eth.—Johnson—Whitbey & Hutcheson; Ethic. Hutch: Met.; Syllogist Disput: in Latin in the Hall—Lat: Decl: & Them.—Engl.; Essays; Lat: & Engl: Verses and Repetitions continued.

Fourth Year.

Ciceron: Tusc: Disput—Livii & Taciti Historiae; Lucan. Pharsal.—Juv. & Pers. Sat.; Plant. Com. Hom. Odys.; Soph: Eurip: Aesch: Tragoed.—Thuc. Histor.—Herodot: Histor.; Longinus de Subl: Demosth: Orat.—Dionys. Halicarn. Isocrates; Hebr. Gram. & Bibl. Hebr. Grot de B. & P. or Pufendorf; Hutcheson Mor. Phil. & aliorum to be continued. Metaph. to be continued; Lat; Th; & Declam: Philosophical Essays in Eng. & Latin & Latin & Eng. Verses; Disputations in the Hall and Repetitions continued.

Mind; and to train them up in all virtuous *Habits*, and all such useful *Knowledge* as may render them creditable to their Families and Friends, Ornaments to their Country and useful to the public Weal in their Generations.”¹

“As to Religion, there is no Intention to impose on the Schollars, the peculiar Tenets of any particular Sect.”

Discussions theological, which hampered the growing activities of Harvard and Yale, seem to have burned themselves out before the actual beginnings of this institution. Abundant evidence shows that they were for some time violent.² That the scheme of erecting a college in New York engaged the attention of the foremost thinkers of the day, is a matter of common knowledge. A pamphlet, circulated when the idea of the college was still in embryo, finds place here, in that it is one of America's earliest contributions to educational literature and sets forth the new ideal of education for citizenship in unmistakable fashion. “Drawn up and published, at the desire of some gentlemen of New York, who were appointed to receive proposals relative to the establishment of a College in that Province,” the *General Idea of the College of Mirania* embodies in its pages so many of the truths which have now become commonplace in college administration and government, that the importance of the document in a history of the curriculum can hardly be overlooked. It is our first comprehensive plan of a college course developed logically and intended to form “a succession of sober, virtuous, industrious citizens.”³

¹ (*Advertisement*, par. iv.)

² Preface to *The Independent Reflector* 1753, nos. XVIII, XIX, XX.

³ The Miranians “wisely judged that nothing could so much contribute to make such a mixture of people coalesce and unite in one common interest as the common education of all the youth at the same public schools under the eye of authority.”

“The object they always kept in sight was the easiest, simplest and most natural method of forming youth to the knowledge and exercise of private and public virtue; and therefore they did not scruple to reject some things commonly taught at colleges, to add others, and shorten or invert the order of things, as best suited their circumstances.”

"With regard to learning, the Miranians divide the whole body of people into two grand classes. The first consists of those designed for the learned professions, by which they understand divinity, law, physic and the chief offices of the state. The second class consists of those designed for the mechanic professions, and all the remaining people of the country."

"Any scheme, that either proposes to teach both these grand classes after the same manner, or is wholly calculated for one of them, without regarding the other, must be very defective. And yet so it is, that public seminaries are almost universally calculated for the first class; while a collegiate school for the instruction of the latter is rarely met with. This class of people, by far the most numerous, and also the hands and strength of every government, are overlooked, and have nothing but this alternative left them, either to be satisfied with what small portion of the arts and sciences they can glean at private schools, or to go through a course of learning at colleges for which they have neither time nor use."

Surely much of our modern discussion of electives and the introduction of new subjects into the college course, and even debates on the curriculum of the common school, have turned on this same proposition here first formulated.¹

"The Mechanics' School * * * is in no other way connected with the college than by being under the inspection of the same trustees. At fifteen years of age the mechanic's education is finished." The Miranians "value themselves highly on the institution of this school; and often tell strangers, that

¹ It is true that Benjamin Franklin, in Philadelphia, had in 1749, in his "Proposals Relating to the Education of Youth in Pennsylvania," urged the importance of teaching in the Academy, of which he then became the founder. "Things that are likely to be most useful and most ornamental, regard being had to the several Professions for which they (*i. e.*, the pupils) are intended" (reference: Appendix A, p. 497, *Hist. of U. of Penn., Montgomery*). but the differentiation between a college, or professional course, and a mechanic school does not present itself to his mind. It is as a systematic discussion of the whole educational field that the pamphlet on the College of Mirania becomes profitable for study.

as a trading people, it is often of the greatest importance to them."

✓ A Latin School is provided, preparatory to the College. Entrance is to be had at nine years of age, "provided [the pupils] can write tolerably, and can read and articulate the English tongue." "The school is divided into five great forms or classes." The first four years are given to the Latin tongue, and improving the youth in English and writing at leisure hours. The fifth year the highest class divides the day between Latin and Greek, proceeding through the Greek declensions and conjugations, St. Luke's Gospel, Lucian's dialogues, etc. Thus at fourteen years of age, well versed in the Latin tongue, with some foundation in the Greek, the youth are entered into the first class of the College.

Here they read Theocritus, Hesiod, Homer and Xenophon, learn arithmetic, vulgar and decimal, merchants' accounts, algebra and some of the first books of Euclid.

The next year, algebra, Euclid, astronomy, chronology, navigation and "other most useful branches of mathematics," logic, metaphysics; "but a small space of time serves for these studies." "At proper seasons, when the weather permits, this class is exercised in practical geometry, in surveying lands and waters, and in plotting and ornamenting the maps of such surveys. There is a weekly exercise for their further improvement in Greek and Latin."

The third class studies ethics and physics, including under the latter natural history, mechanic and experimental philosophy. They read Plato, Cicero, Locke, Hutcheson, Puffendorff, and point the moral contained in facts of history, both sacred and profane.

In the fourth year they bring home what has been taught to the business of life. "You may observe that what has been chiefly aimed at, in the foregoing classes, is to teach youth to think well, that is, closely and justly. When this is attained it is a noble basis, but would, however, be useless without its superstructure; without teaching them to call forth and avail themselves of their thoughts, in writing, speaking, acting and

living well. To make youth masters of the first two, viz., writing and speaking well, nothing contributes so much as being capable to relish what has been well written or spoken by others. Hence, the proper studies of this class are rhetoric and poetry, from which arise criticism and composition." Tully's Oration for Milo and Demosthenes' harangue for Ctesiphon are studied minutely, and three more orations, one in Greek, one in Latin and one in English, are read in a generally critical manner. Poetry is elaborately analyzed and rhetorical criticisms are "carefully revised and corrected by the professors."

In all this the Miranians seem to have attained at a bound what our colleges are still struggling to secure. Appreciation of literature and clear and idiomatic vernacular expression. "It must be observed, however, that the Miranians do not propose to make orators and poets of all their youth by these studies. They are sensible that both the poet and orator must be born, not made. But, say they, those to whom nature has given a genius for composition, either in poetry or prose, will be thus put in the method of improving that genius to the best advantage, and those who have no such genius will, however, be enabled by these studies to write elegantly, or at least correctly in the epistolary way and on the common and most important concerns in life."

"Further, the Miranians say, that this taste for polite letters, not only teaches us to write well, and renders life comfortable to ourselves, but also contributes highly to the cement of society and the tranquillity of the state," returning, thus, again to the fundamental idea that college education is a preparation for citizenship. ✓

The fifth, or highest class, is given over to agriculture and history. Physics contributes to one, philosophy to the other. "In the course of the above-mentioned studies, and from their private reading for amusement, the Miranian Youth, I need not tell you, must, by this time, have obtained a pretty full knowledge of the events that happened in the world before they were born." It is to a review of those events "in

the calm light of philosophy," that the last year is devoted, in order to make them "a lesson of ethics and politics, and an useful rule of conduct and manners through life."

"They conclude the whole with a view of our colonies in this hemisphere; their state, produce, interests, government, etc., taking some notice as they go along of the French and Spanish settlements that we are chiefly concerned with in trade. Every Sunday night about an hour is spent in the study of Bible history."

We learn further that the course aims at "general knowledge," that the studies are arranged in their "natural order," and that "the youth are thus raised by a chain of easy steps to the summit of their education." "Agriculture, history and politics are the studies of men and require a ripe judgment" and "should be placed last, in order to send the youth abroad into the world, warm, (if I may so express it) from those studies which their own interests and service of their country will generally require them chiefly to cultivate."

All the Saturdays are given over to public exercises, i. e., disputations and criticism in the languages, mathematics, ethics and physics, and declamations and orations.

"There is one thing peculiar to the Miranians in these exercises, which I had almost forgotten to mention, viz., that they are most commonly in the English tongue." "They greatly condemn the practice of neglecting the mother tongue, and embarrassing a young student, by obliging him to speak or compose in a dead language."

There are likewise masters in the college for teaching French, Italian, Spanish and German at private hours, and a fencing master, who, besides the use of the sword, teaches the military exercise. There is lastly a dancing master. None of the youth, however, are obliged, by the statutes of the college, to attend these masters. As for Religion—"They know well enough that the youth are apt to give nothing but a cool attention to whatever has the appearance of set lectures and formal discourses on morality, while a word dropped, as it were, casually, by a skillful master, in a proper

season, shall strike so much the deeper as it was not expected, and make an impression perhaps never to be erased."

"It is impossible to express what a foundation in piety may be made, on such occasions, by a good and fervent man, whose person and character we love and whom we suspect of no design upon us but our own welfare."

History—"is nothing else but religion and philosophy taught by examples, and finally, by contrast, with less favored realms, to show us how "to set a just value on the British Constitution, and that glorious plan of civil and religious liberty which it secures to us."

"There is only one thing wanting to complete the whole; namely, the study of revealed religion. And for this purpose the Sunday evenings are set apart through the year, when a lecture is read in all the higher classes on the fundamental principles of our common Christianity." "For those who are intended for the sacred office of the ministry, private opportunities are given them for studying their own particular systems."

"What can we figure to ourselves more noble than the whole wisdom of a community thus using every human effort to train up and secure to the state a succession of good citizens to the latest generations? Considered in this light, well might Tully call education a divine work; well might Plato call it a God-like one."

Thus closes, as it began, with the idea of *citizenship* in the foreground, this admirable document. It was, of course, a fancy sketch, and if the author of it had done nothing else we might pass it over as an idle dream of little practical use and merely interesting as numerous other such compositions have been in the history of literature, attractive from the quaintness of its style and deserving a place in all collections of curious Americana. ✓

But the author of the *General Idea of the College of Mirania* was no impractical dreamer, nor was his educational theory unsubstantial. His Scotch intellect and Scotch training were too matter-of-fact to allow much room for

visions and all his theory soon manifested its entire practicality in a real program for a real college.

Whether the founders of the "Academy" in Philadelphia had or had not in mind anything so comprehensive as a University, the Constitutions of 1749 speak of "laying a foundation for posterity to erect a seminary of learning more extensive and suitable to their future circumstances." If it was intended to divert the academy into the collegiate pathway no more effective means to accomplish this result could have been taken than the election of the author of the pamphlet we have been examining, First Provost of the institution. An energetic character, in the full flush of his young manhood, but recently returned from his ordination at the hands of the Bishops of Lincoln and Carlisle, William Smith entered upon his career as the executive head of the college in Philadelphia with an equipment for his work ample from practical experience, and an interest in educational problems vital and all absorbing.¹

His *General Idea of the College of Mirania* gave definite form to the American college course. From the time of his association with the Philadelphia institution, the focus of its initiative changes, the ideal is altered, the vagueness of its collegiate ambitions disappears, a practical realization of its scholastic hopes is attained, the utilitarian and preparatory, the childish and charity departments lapse, and a dignity is acquired with the conferring of the degree-appointing power, and the election of a Provost; a definiteness of aim is secured by the promulgation of an elaborate course of study at once systematic, regular and scholastic that endows the institution with a character unique among contemporary American collegiate establishments.

This "scheme of liberal education" was laid by the Faculty

¹ In England he had been "busy not merely in devising plans for educating a class of persons who had not been reached by the ordinary methods then in use, but he was full of zeal and energy in offering himself to carry these plans into practical operation. His zeal in the cause of education, as he described it, 'bordered at that time on enthusiasm.'"

Memoir of Rev. William Smith, by Provost Stille.

before the Board of Trustees for their approval April 13, 1756, and remained practically unchanged through the whole period of existence of the Colonial College. What was this scheme of study? ¹

We find, after an extended examination of the plan of the College of Mirania, many points of resemblance to notice. The freshman year is given over to Arithmetic, Algebra, Fractions and Extracting Roots, Equations and Euclid, (six books) Homer and Juvenal, Pindar, Cicero, Livy, Thucydides, or Euripides, and Dionysius, with a necessary review of Latin and English Exercises. There is a little logic given during the third term and "at leisure hours" Disputations begin and some afternoons are spared for Declamations.

The second year finds the student in the midst of Mathematics, Surveying, Dialing, Navigation, Plain and Spherical Trigonometry, Conic Sections, Fluxions, Euclid, 11 and 12 books, and in the afternoons Rhetoric with the classical models Longinus, Horace, Aristotle, Quintilian, Cicero and Demosthenes, and imitations attempted.

In the third term Moral Philosophy is begun and also Natural Philosophy. Disputations and Declamations are continued.

In the third year, as with the Miranians, "the day is divided between the study of ethics and physics."

Ethics, is Hutcheson. The Law of Nations is taught from Burlamaqui. There is also an Introduction to Civil History, to Laws and Government, Trade and Commerce. "Mechanics and experimental philosophy" are, as before, comprehended under physics, and we have, therefore, space devoted to Astronomy, Natural History, Chemistry and Agriculture.

The classical books to be read subserve the general purpose that, as in the previous publication, is stated to be "to lay a general foundation" and to form the taste "for the acquisition of solid wisdom." As an aid to this is provided a suggestive list "of the most excellent writers in the various branches of literature," "for a private library," for consultation and extended study.

"The last book in the catalogue is the Holy Bible, without which the students' library would be very defective. But though it stands last, we do not mean that they are to defer reading it to the last, it being part of our daily exercise and recommended from the beginning. We only intimate, by this disposition, that when human Science has done its utmost, and when we have thought the youth worthy of the honors of the Seminary, yet still we must recommend them to the Scriptures of God in order to compleat their Wisdom, to regulate their conduct through life, and guide them to happiness forever."

There is the same attempt to arrange the studies in a method of progressive difficulty as was noticeable in the "General Idea," the statement here reading, instead of "natural order," "a principal regard has been paid to the connection and subserviency of the *Sciences*, as well as to the gradual openings of young minds. Those parts are placed first which are suited to strengthen the inventive Faculties, and are *instrumental* to what follows. Those are placed last which require riper judgment, and are most immediately connected with the main business of life." The position of Rhetoric after Philosophy is again reasserted as logical and proper. "Thus it is hoped the Student may be led through a scale of easy ascent, till finally rendered capable of thinking, Writing and Acting well, which is the grand aim of a liberal education."

The limit of the time for the entire course to three years deprives the program at Philadelphia of much of the elaborate detail of the "General Idea" but, so far as circumstances permit, we see in the later document the working out of the notions formulated in the earlier one. The changes are only such alterations as an intelligent administrator would cordially adopt when an ideal was reduced to practice, assisted by the suggestions of his English critics when the pamphlet on the college of Mirania was submitted to them for examination.¹

¹ *Life of William Smith.*

I. As outlined by Provost Smith, the program appears as follows:

VIEW OF THE PHILOSOPHY SCHOOLS.
FORENOON.

	INSTRUMENTAL PHILOSOPHY.	
	<i>Lecture I.</i>	<i>Lecture II.</i>
FIRST YEAR.		
Freshman, May 15. First Term. Three Months.	Latin and English Exercises continued. — — — — — — — — — —	Common Arithmetic reviewed. Decimal Arithmetic. Algebra.
Second Term. Three Months.	The same. — — — — — — — — — —	Fractions and extraction of roots. Equations, simple and quadratic. Euclid first six books.
January. Third Term. Four Months.	Logic with Metaphysics. — — — — — — — — — —	— — — — — — — — — — Euclid a second time. Logarithmical Arithmetic.
Remarks:	N. B. At leisure hours disputation begun.	
SECOND YEAR.		
Juniors, May 15. First Term. Three Months.	Logic, etc., reviewed. Surveying and Dialing. Navigation.	Plain and spherical trigon. — — — — — — — — — —
Second Term. Three Months.	Conic Sections. Fluxions. — — — — —	Euclid, 11th book. Euclid, 12th book. Architecture, with Fortifications.
	MORAL PHILOS. begun	NAT. PHILOS. begun.
January. Third Term. Four Months.	Viz., Compendium of Ethics. — — — — — — — — — —	General Properties of body. — — — — — — — — — — — — — — — Mechanic Powers. Hydrostatics. Pneumatics.
Remarks:	N. B. Disputation continued.	N. B. Declamation and public speaking continued.
THIRD YEAR,		
Seniors, May 15. First Term. Three Months.	Ethics continued. — — — — — Natural and Civil Law.	Light and Colours. Optics, etc. Perspective.
Second Term. Three Months.	Introduction to Civil History. Introduction to Laws and Government. Introduction to Trade and Commerce.	Astronomy. Natural History of Vegetables. Natural History of Animals.
January. Third Term. Four Months.	Review of the whole. — — — — — Exam. for Degree of B. A.	Chemistry. Of Fossils. Chemistry of Agriculture. — — — — — N. B. Through all the French may be studied at leisure hours.

VIEW OF THE PHILOSOPHY OF SCHOOLS—*Continued*

	AFTERNOON. Classical and Rhetoric studies.	PRIVATE HOURS. Books recommended for improving youth in various branches.
FIRST YEAR.	<i>Lecture III.</i>	
Freshman, May 15. First Term. Three Months.	Homer's Iliad. _____ Juvenal.	Spectator Rambler, etc., for improvement of style and knowledge of life. Barrow's Lectures. Pardie's Geometry. MacLaurin's Algebra. Ward's Mathematics. Keil's Trigonometry.
Second Term. Three Months.	Pindar. Cicero, Selected parts. Livy resumed.	Watts' Logic and Supplement. Locke on Human Understanding. Hutcheson's Metaphysics. Varenius's Geography.
January. Third Term. Four Months.	Thucydides or Euripides. Well's Dionysius. _____ N. B. Some afternoons spared for declamation this year.	Watts' Ontology and Essays. King <i>De Orig. Mali</i> , with Law's notes. Johnson—Elementary Philosophy.
REMARKS.		
SECOND YEAR.		
Juniors, May 15. First Term. Three Months.	Introduction to rhetoric. Longinus critically. _____ _____ _____ Horace's Art Poet. crit. Aristot. Poet. etc. crit. Quintilian, select parts.	Vossius. Bossu. Pere Bohours. Dryden—Essays and Prefaces. Spence on Pope's Odyssey. Trapp's Praelect. Poet. Dionysius Halicarn. Demetrius Phalereus. Stadae Prolusiones.
Second Term. Three Months.		Patoun's Navigation. Gregory's Geometry on Fortifications. Simson's Conic Sections. MacLaurin's and Emerson's Fluxions. Palladio by Ware.
January. Third Term. Four Months.	Cicero pro Milone. _____ Demosthenes pro Ctesiphon. _____ _____ N. B. During the application of the rules of these famous orations, imitations of them are to be attempted on the model of perfect eloquence.	Helsham's Lectures. Gravesande. Cote's Hydrostatics. Desaguliers. Muschenbroek. Keil's Introduction. Martin's Philosophy. Sir Newton's Philosophy. Maclaurin's view of Philosophy. Rohault per Clarke.
REMARKS.		
THIRD YEAR.		
Seniors, May 15. First Term. Three Months.	Epicteti Enchiridion. Cicero de Officiis. Tusculan Quaest. Memorabilia Xenoph. Greek.	Puffendorf by Barbeyrac. Cumberland de Leg. Sidney Harrington. Seneca. Hutcheson's Works. Locke on Government. Hooker's Polity.

Second Term. Three Months.	Patavii Rationar. Tem- porum. Plato de Legibus. Grotius de Jure, B. & P.	Scaliger de Emendatione Temporum. Preceptor. LeClerc's Compendium of History.
January. Third Term. Four Months.	Afternoons of this third term for composition and declamation on moral and physical subjects. Philosophy acts held.	Gregory's Astronomy. Fortescue on Laws. N. Bacon's Discourses. My Lord Bacon's Works. Locke on Coin. Dave- nant. Gee's Compend. Ray Derham. Spectacle de la Nature. Religious Philosopher. Holy Bible, to be read daily from the beginning, and now to supply the deficiencies of the whole.

"Concerning the foregoing plan, it is to be remarked that life itself being too short to attain a perfect acquaintance with the whole circle of the sciences, nothing can be proposed by any scheme of collegiate education, but to lay such a general foundation in all the branches of literature, as may enable the youth to perfect themselves in those particular parts, to which their business or genius, may afterwards lead them, and scarce anything has more obstructed the advancement of sound learning, than a vain imagination, that a few years, spent at college, can render youth such absolute masters of science, as to absolve them from all future study.

"Those concerned in the management of this seminary, as far as their influence extends, would wish to propagate a contrary doctrine; and though they flatter themselves that, by a due execution of the foregoing plan, they shall enrich their country with many minds, that are liberally accomplished, and send out none that may be justly denominated barren, or unimproved; yet they hope, that the youth committed to their care, will neither at college, nor afterwards, rest satisfied with a general knowledge, as is to be acquired from the public lectures and exercises. They rather trust that those, whose taste is once formed for the acquisition of solid wisdom, will think it their duty and most rational satisfaction, to accomplish themselves still further, by manly perseverance in private study and meditation.

"To direct them in this respect, the last column contains a choice of approved writers in the various branches of literature, which will be easily understood when once a foundation is laid in the books to be used as classics, under the several lectures. For these books will not be found in this last column, which is only meant as a private library, to be consulted occasionally in the lectures, for the illustration of any particular part; and to be read afterwards, for completing the whole.

"In the disposition of parts of this scheme, a principal regard has been paid to the connexion and subserviency of the sciences, as well as to the gradual opening of young minds. Those parts are placed first which are suited to strengthen the inventive faculties, and are instrumental to what follows. Those are placed last, which require riper judgment, and are more immediately connected with the main business of life.

"In the meantime, it is proposed that they shall never drop their acquaintance with the classic sages. They are every day called to converse with some one of the ancients, who, at the same time that he charms with all the beauties of language, is generally illustrating that particular branch of philosophy or science, to which the other hours of the day are devoted. Thus, by continually drawing something from the most admired masters of sentiment and expression, the taste of youth will be gradually formed, to just criticism, and masterly composition.

"For this reason, composition, in the strict meaning of the term, cannot well be begun at an earlier period in the plan. The knowledge of Mathematics is not more necessary, as an introduction to natural philosophy, than an acquaintance with the best ancient and modern writers, especially the critics, is to just composition; and besides this, the topics or materials are to be supplied, in a good measure from moral and natural philosophy.

"Thus, it is hoped, the student may be led through a scale of easy ascent, till finally rendered capable of thinking, writing, and acting well; which are the grand objects of a liberal education. At the end of every term, some time is allowed for recreation, or bringing up slower geniuses.

"No doubt, those who compare this plan with what is laid down in the preceding essay, will think the term of three years too scanty a period for the execution of everything here proposed. And it must be acknowledged that a longer period would be necessary. But circumstances must always be regarded in the execution of every plan; and the reason of confining the execution of this to the term of three years hath been mentioned in the postscript to the former number."

Compared with the "account of the College of New Jersey, 1764" already cited, the curriculum prepared for the University of Pennsylvania is chiefly noticeable for the entire absence of any special aim toward theology as a profession and the subordination of the classical languages to meet utilitarian needs. In the New Jersey programme it is the languages that have chief place. Stress is also laid on the Disputations, especially in natural and revealed religion. "A professor of divinity, especially, for the benefit of the theological students, would be of singular utility," President Finley says, a statement that effectually differentiates this plan of study from the two schemes arranged by Provost Smith, and justifies our placing the College of New Jersey, even if other facts did not attest the singular relationship, in the category with Harvard and Yale, children of the English Cambridge.

Provost Smith's program, on the other hand, bears a strik-

ing resemblance to the revised course of study introduced by Alexander Girard in 1753 in the University of Aberdeen.¹

Provost Stille (1868-1880) says of it: "Its best eulogy is, that it has formed the basis of our present American College System," and he continues, after analyzing the curriculum: "It may be safely affirmed that in 1756 no such comprehensive scheme of education existed in any college in the American colonies. We have Dr. Smith's own authority for saying that this scheme did not exist merely on paper, but that it was faithfully carried out in its details, and with the most brilliant results, during the whole period of his connection with the College. This statement is confirmed, so far as the instruction in Natural and Moral Philosophy is concerned, by an examination of the note books of the lectures (which are still preserved), which he delivered on those subjects."²

Provost Smith³ carried this curriculum to Washington College, Md., in 1782. His biographer states that this course of study was adopted in 1776 by James Madison for use in the College of William and Mary.

The historian of the University of Pennsylvania⁴ is at pains to speculate on the probability of the truth of this statement, but the more usual understanding of the cause of the change of the curriculum at William and Mary in 1779 has been based on the statement of Thomas Jefferson, who himself assumes credit for the reforms.⁵

¹ See *History of University of Aberdeen*, by Bullock. *History of Aberdeen*, Walter Thom, 1811. Quoted by Montgomery, *History of U. of P.*, p. 253.

² Stille, *Memoir of Rev. William Smith*, Philadelphia, 1869, p. 12.

³ *Life and Correspondence of Rev. William Smith, D. D.*, by his great-grandson, Horace Wemyss Smith, Philadelphia, 1880, vol. i, p. 124.

⁴ Montgomery, *Hist of U. of P.*, p. 263.

⁵ It will be remembered that Jefferson writes as follows: "On the first of June, 1779, I was appointed Governor of the Commonwealth, and retired from the Legislature, being elected also one of the Visitors of William and Mary College, a self-electing body, I effected during my residence in Williamsburg that year a change in the organization of that in-

In his Notes on Virginia History, Jefferson gives no other origin for the reforms save "the Board of Visitors,"¹ and President Stiles, of Yale, in his diary, under date of June 8, 1784, quotes Jefferson as giving to the Visitors credit for the alteration.

President Madison, himself, when writing to President Stiles, August 27, 1780 (when the alteration was of recent date), omits any reference to Dr. Smith's programme. He gives in brief, a history of the college from its foundation in 1693, and says: "The first Plan was imperfect," but that "Under this form it continued from ye year 1729 until ye beginning of ye yr. 1780."

"The Society at present consists of a President, who is always to be one of the Professors, and is now Prof. of Math. and Nat. Phily., 2 of Law and Police, 3 of Chymistry and Medicine, 4 of Ethics and ye Belles Lettres, 5 of Modern Languages." "The Prof. of Humanity has been abolished, the Professorship of Divinity is also abolished. It was formerly instituted for ye purpose of ye Church of England, wh. was here established, but it is now thought that Establishments in Favr. of any particular Sect are incompatible with ye Freedom of a Republic, and therefore, ye Professorship is entirely dropped," and then makes the following extraordinary statement: "The Doors of ye University are open to all, nor is even a knowledge in ye ant. Languages a previous Re-

stitution, abolishing the Grammar School and the two Professorships of Divinity and Oriental Languages, and substituting a Professorship of Law and Police, one of Anatomy, Medicine and Chemistry, and one of Modern Languages: and the charter confining us to six professorships, we added the Law of Nature and of Nations and the Fine Arts to the duties of the Moral Professor, and Natural History to the Professor of Mathematics and Natural Philosophy."

(Thomas Jefferson, *Memoir*, vol. i, p. 43.)

¹ "A majority of the Visitors petitioned the Assembly of Virginia, about 1777, to alter the Constitution of the College, and it was proposed to appoint a Chancellor and three of the first Literary Characters at the Supremacy in the Institution. But the other Visitors opposed it, and nothing has been done by the Assembly. The Visitors themselves, however, then made great Alteret."

quisite for Entrance. The Students have ye Liberty of attending whom they please, and in what order they please, or all ye diffr. Lectures in a term if they think proper."

"The time of taking Degrees was formerly ye same as in Cambridge, but now depends upon ye Qualifications of ye candidate. He has a certain course pointed out for his first Degree, and also for ye rest. When Master of Either, ye Degree is conferred."

This agrees so closely with the custom that later obtained at the University of Virginia that it seems reasonable to refer the entire reform movement to the wisdom of the same distinguished scholar and publicist, especially since he is found willing to bear the honor. If Jefferson knew of Dr. Smith's program the fact has not yet come to light. The sole authority for crediting Dr. Smith with the system introduced is his biographer, whose credibility is very much in doubt.

But from whomsoever derived, the change inaugurated at William and Mary in 1779 was a radical departure from the restricted Oxford curriculum that had been carried on since the founding of the institution.¹ The abolishment of the Chair of Divinity would alone show that the ideal of the friends of the college had changed, and the statement of President Madison that "an establishment in favor of any particular sect was thought to be incompatible with ye Freedom of a Republic" is but an index of the motive that influenced the reformers of whom Jefferson was chief,² to re-establish the college as a training school for republican citizenship.

It is this fact that makes memorable the administration of President James Madison, and lifts William and Mary College into a position of first rate importance. Coupled with

¹ The present President, Lyon Gardiner Tyler, says, in a private letter, Nov. 4, 1900, when speaking of this early period: "This was while the College had the Oxford Curriculum."

² See *History of College of William and Mary*, Herbert B. Adams, p. 39. "Thus Jefferson introduced the first distinctively modern currents into the curriculum of William and Mary."

this reform, the formal introduction of Professorships of Law and Police, Anatomy and Medicine, Natural Philosophy and Mathematics, Moral Philosophy and, on an equal footing, the Modern Languages, provided the institution with a curriculum broader than that of any of its contemporaries and the absolute freedom of the electives made its course of study unique.¹

The colonial period of our college history closes with the institution of these changes. We have watched the progress of the curriculum from its narrow and restricted beginnings

¹ Though in Princeton in 1772 a somewhat elaborate course of study was presented on paper in an address to the "Inhabitants of Jamaica and Other West India Islands in Behalf of the College of New Jersey" (Phila., 1772) by President Witherspoon, the practical execution of the scheme as outlined appears to have been hampered by inadequate resources, and after sketching the programme of studies, President Witherspoon frankly states:

"The express purpose to which the benefactions now requested will be applied is the establishment of new professorships, which will render the institution not only more complete in itself, but less burdensome to those who have undertaken the important trust. The whole branches of Mathematics and Natural Philosophy are now taught by one professor, and the President is obliged to teach Divinity and Moral Philosophy as well as Chronology, History and Rhetoric, besides the superintendence and government of the whole. The short lives of the former presidents have been by many attributed to their excessive labors, which it is hoped will be an argument with the humane and generous to lend their help in promoting so noble a design."

"The regular course of instruction" was "in four classes, exactly after the manner and bearing the names of the classes in the English Universities: Freshman, Sophomore, Junior, and Senior. In the first year they read Latin and Greek, with the Roman and Grecian Antiquities, and Rhetoric. In the second, continuing the study of the languages, they learn a compleat system of Geography, with the use of the globes, the first principles of Philosophy, and the elements of mathematical knowledge. The third, though languages are not wholly omitted, is chiefly employed in Mathematics and Natural Philosophy, and going through a course of Moral Philosophy. In addition to these, the President gives lectures to the Juniors and Seniors, which consequently every student hears twice over in his course, first upon Chronology and History, and afterwards upon the Composition and Criticism. He has also taught the French language last winter, and it will continue to be taught to all who desire to learn it.

"Orations are pronounced in the Hall immediately after prayers."

in Cambridge until it emerges into full freedom at Williamsburg. We have seen how it came to these shores with its slender packet of Divinity Catechetical and its Hebrew Grammar, ready to dispute either syllogistically or forensically, after the manner of Cambridge. We have seen how it taught the students in three noble institutions after this approved fashion, and handed these traditions to a fourth. And then, realizing its opportunities in a new country untrammelled by the restraint of custom, but burdened with new responsibilities, with a larger clientage than ever it had dreamed of, in a land where no class was debarred from receiving its ministrations, it loosened the bands of its sectarian restraints, and, in three other colleges, began directly a new career, and, with an ideal not less noble than what had heretofore governed its activity, strove to train the leaders not only of the church but of the state.

To realize this aim it modified and enriched its original programme of studies. The older institutions enlarged their facilities, the younger supplied themselves directly with equipment of books, apparatus and men. Methods of instruction were altered, the local conditions were carefully scrutinized, and the curriculum that would best serve the citizen of a free commonwealth was declared to be the pattern of all others.

The full realization of these aims and conditions was a matter of slow growth. Conditions of poverty and political strife prevented a symmetrical development. But the ideal remained fixed and constant, and little by little became more certain to the view.

It is to a consideration of the growth toward the ideal of this curriculum in the College in the United States that we will now turn. From 1779 to 1869. From the Reforms of Thomas Jefferson to the Reforms of Charles W. Eliot.

CHAPTER IV

GROWTH AND DEVELOPMENT

AN organism in process of growth assimilates matter; it does not annex it. The curriculum of the college in the United States has unfolded in its breadth and fulness by appropriating into its structure, and making an integral part of its fundamental nature, the highest ideals and aims of the generations of mankind it serves. Progressive as its development has been, the movement from the colonial period to modern times was of a conservative character that militated against sudden and violent change in methods and practices. Influenced always by a frank regard for public opinion, private resources and the peculiar circumstances of the various institutions in which college work has been conducted, the course of study remained uniform for such extended periods of time that it naturally enough acquired a permanence of definition in the minds of its friends that seriously hampered even incidental change. Reforms of a fundamental character, except in the instance of William and Mary, were never successfully undertaken. The process of alteration from the colonial type of curriculum to that of modern date has everywhere proceeded by cautious amalgamation and well considered deliberation.

It would be useless to hope that during the Revolutionary war much scholastic progress could be made. Immediately subsequent to this event, questions of resource and of finance take precedence in collegiate annals.¹ In Harvard, Yale and Princeton the decline of divinity and the continued disregard of Hebrew are not more gradual than the rise and recognition of the modern languages and history.² In these in-

¹ *Stiles' Diary*, June 30, 1790.

² *Stiles' Diary*, March 1, 1781; May 28, 1781. *Memoirs of Frederick A. P. Barnard*, Fulton, p. 64.

stitutions the system of tutors still exists and the course of study is not essentially modified. President Stiles of Yale, on assuming the executive office in 1778, gives us as the programme:

Freshman Class: Virgilius, Ciceronis Orationes, Greek Testament, Ward's Arithmetic.

Sophomore Class: Graecum Test., Horatius, Louth's English Grammar, Watt's Logic, Guthrie's Geography, Hammond's Algebra, Holmes' Rhetoric, Ward's Geometry, Vincent's Catechism, Saturdays, Ward's Math.

Junior Class: Ward's Trigonometry, Atkinson's and Wilson's Do. Graec. Testament., Cic. de Oratore, Martin's Phil., Grammar, Philosophy, 3 vol., Vincent Saturdays.

Senior Class: Locke's Human Understanding, Wollaston's Rel. Nat. delineated, and for Saturdays, Wollebius, Ames Medulla, Graec Test. (or Edwards on the Will, sometime discontinued), President Clap's Ethics.¹

He writes to President Madison to learn "whether" at William and Mary, "besides teaching the learned languages, you carry young gentlemen through Philosophy, astronomy, ethics, physics, law and Divy,"² as if in these six subjects was included everything suited "to educate and form the youth for usefulness and honor,"³ and in his college memoranda under November 29, 1783, he repeats the same program as in use at that time.⁴

¹ *Stiles' Diary*, Nov. 9, 1779.

² *Diary*, July 12, 1780.

³ *Ibid.*

⁴ COURSE OF ACADEMIC RECITATIONS.

Senior Class: Syllogistic Disputa, first Monday in mo. Forensic all other Mondays and every Tuesday.

Wednesday, Thursday, Friday, Locke—began Act. Saturday, Vincent.

Junior Class: Disputa, the same as Seniors.

Morning—Saturday, Vincent.

XI. Math. & Trig. to Dec. 6; began Martin's Phil. Gram. Dec. 6, circa.

V. Began Martin's Phil. after March Qu. Day.

May 29, begun 2d Vol.

At Harvard in 1784 it is discovered that not every student

Sophomore Class: Three Recitations per day except Thursday & Saturday.

Morning Recitations—Louth's Eng. Gram.

Guthrie's Geogra in winter.

XI. o'clock—Greek Test. & speaking or Compos.

V. o'clock—Horace & do. & do.

Saturday P. M. Speaking pub. in Chapel.

" XI. Vincent.

Freshman Class: Morning—Virgil.

XI. Greek Testament & Speaking.

V. Tully & Speaking.

The Hon. Jeremiah Mason, who was now a Senior, writes thus in his Autobiography: "During our Senior year . . . the President insisted that the whole class should undertake the study of Hebrew. We learned the alphabet, and worried through two or three Psalms, after a fashion: with the most of us it was mere pretense. The President had the reputation of being very learned in Hebrew, as well as several other Eastern dialects. For the Hebrew he possessed a high veneration. He said one of the Psalms he tried to teach us would be the first we should hear sung in Heaven, and that he should be ashamed that any of his pupils should be entirely ignorant of that holy language." *Stiles' Diary*, Feb. 28, 1788.

¹ Nothing except the continual perusal of this diary of President Ezra Stiles will give one a clear comprehension of the manifold difficulties that beset the President of an American college in the colonial era. With inadequate resources, in a troublous time, with the change from the old order to the new taking place before his very eyes, the President of those days faced a peculiar educational problem that appears the more involved the closer we examine its varied details. There was, first of all, the ideal of what a college course should be that was in the minds of alumni and friends of the institution. There was, secondly, the present conditions ever changing, and constantly modifying any attempt on his part to enforce old requirements. There was, thirdly, the future to be looked to, that the student-body might be prepared to take up and meet successfully the strange conditions of citizenship they would inevitably encounter. In President Stiles' administration we can watch, through the pages of his Diary, the gradual evolution of the process of growth of a *quasi* theological course of study into something as near akin to a preparation for citizenship as the times afforded.

In no department is this more clearly seen than in the choice of subjects for disputation. Watch how the preponderance of religious-controversial topics declines. Notice how brisk and up-to-date, how vital and how necessary to the welfare of the future citizens, these discussions become.

(Nov. 9, 1779; Nov. 24, 1779; Dec. 7, 1779; Feb. 22, 1780; Feb. 29, 1780; Dec. 26, 1780.)

is now preparing for the ministry, and those that are " should

(Jan. 2, 1781; Aug. 14, 1781; Mar. 5, 1782; Apr. 9, 1782; Dec. 9, 1782; Apr. 14, 1782.)

(Apr. 15, 1783; Apr. 21, 1783; Apr. 22, 1783; Apr. 28, 1783; July 9, 1783; June 17, 1783; Dec. 15, 1783; Dec. 22, 1783; Mar. 1, 1783.)

(Mar. 2, 1784; Apr. 19, 1784; Apr. 20, 1784; Mar. 14, 1785; Apr. 18, 1785; June 27, 1785; Nov. 29, 1785; Dec. 19, 1785; July 11, 1786; Feb. 20, 1787; Nov. 26, 1787; Dec. 10, 1787; Mar. 10, 1788; Mar. 24, 1788; Mar. 31, 1788; July 8, 1788; Feb. 10, 1789.)

The bare curriculum (Nov. 9, 1779; Nov. 7, 1780; June 28, 1780; Nov. 29, 1783) is no broader than before, but how much is thrust into it by lectures and discussions—Politics, Law, History, Ethics—and what shall we call it when the President gives as part of his Ecclesiastical History a lecture on ventriloquism?

Observe, also, the wideness of President Stiles' personal range (p. 311, Dec. 1; p. 311, Dec. 2; July 14, 1780; Oct. 26, 1780; Nov. 28, 1780; Dec. 16, 1780; Jan. 6, 1781; July 5, 1781; Dec. 5, 1781; Feb. 26, 1784; Aug. 13, 1785; July 29, 1788; Mar. 25, 1789; Aug. 31, 1791; Dec. 29, 1791; Mar. 8, 1792; Feb. 21, 1792; July 12, 1780; July 23, 1781; Mar. 1, 1784; June 8, 1784; June 21, 1784; July 28, 1784; Feb. 25, 1785; Dec. 24, 1787), the breadth of his sympathies and the limitlessness of his curiosity. We see him learning French (July 26, 1784; Aug. 26, 1784) and Italian (Jan. 12, 1789). We find him in correspondence with all the great and learned of the world. We see him investigating educational conditions at home and abroad, and anxious to put Yale College abreast of the foremost universities of the age. He fills almost every position on his faculty. He teaches almost every branch. He helps the weak, scolds the lazy, dismisses the unruly, and encourages the promising and the ambitious. Some of his opinions of his contemporaries hardly deserve repetition (vol. ii, May 24, 1799), and his conduct before the Legislature at Newport, when the charter for the institution which later was known as Brown University awaited action, is only a trifle above suspicion. Yet, taken as a whole, his career, crowned as it was with a presidency of nearly thirty years, commands our respect and homage.

We see during his administration of Yale's affairs the first faint beginning of the elective system in his decision to make attendance upon the Hebrew class voluntary. (Vol. ii, p. 290, June 30, 1779; June 30, 1790.) The subject of modern languages was under discussion, though nothing came of it. (Vol. ii, p. 296; also p. 297; also p. 298.)

Science (Dec. 24, 1789; Jan. 8, 1790) had a rapid and encouraging growth, and mathematics appears to have come forth out of its elementary stages and to have taken on a mien dignified and scholastic.

Geography must have been more than a text-book affair, though the author of the most famous of the early manuals was one of the tutors (Morse) (Feb. 7, 1780). When we see the President, with some of his senior class, plotting the regions about New Haven Harbor, we are tempted to ask in what more effective manner education in this branch of

make Divinity the subject of their close and serious study" ¹ unhampered by the attendance upon the class of those with whom "Law, Physic, or Politics were the object of their future expectations." ² Yet in the "revision" of the method of instruction reported August 16, 1787, except for the introduction of "other books," and in the increase in the "quantity of the exercises," and "those who do not learn Hebrew attend a French instructor" there is no change from the colonial programme. ³ But, within the year, we find it voted: "That Dr. Waterhouse deliver annually a course of Lectures upon Natural History to such Students as shall obtain permission under the hand of their parents or Guardians to attend; for each of which students he shall receive one guinea, to be charged in their Quarter bills," and three months later the whole subject of mathematical instruction is overhauled and new regulations enacted. Science, and the proper arrangement of the course of lectures, recitations and examinations now receive attention, and in the regulations concerning these latter, in 1791, we meet with a list of subjects well-nigh as comprehensive as that we became familiar with in the College in Philadelphia in 1764, with, of course, the addition of the inevitable Theology. But anything like a detailed ac-

science, according to the laboratory method, could to-day be conducted? The interest in astronomy is active and physics is well established. Even chemistry raises its head, and we hear of botany and geology.

Altogether, the presidency of Dr. Stiles was a time of growth and of careful preparation of the institution for the work that the future had in store for it.

¹ *College Book 8*, p. 183, Nov. 16, 1784.

² Evidently the professor thinks he can do better work with an elective class than with one where the attendance is compulsory. We find here, also, the germ of the "seminar" idea, when all that "voluntarily engage to make Theology their particular study should attend the lecture on Thursday; and that the business of the lecture of that day be, to illustrate and explain one or more of Doddridge's theological lectures, in free and familiar conversation." On account of the decline in interest in the subject of Hebrew, the Professor in that department is ordered to furnish instruction in the English language. (*Col. Book 8*, p. 206, Jan. 26, 1786.)

³ *Col. Book 8*, p. 255, Apr. 29, 1788.

count of the working of the scheme at Harvard is as yet far in the future.¹

¹ *Col. Book 8*, p. 243.

2. On Aug. 16, 1787, the Committee appointed to revise the method of instruction, &c., report that they find there are but few exercises performed before the Tutors after Thursday morning in any week; and that it is not usual for the students to attend the Tutors in the weeks in which the vacations end.

The Committee are of opinion that the exercises ought to commence in the week in which each vacation ends on Thursday at eleven o'clock A. M. except the summer vacation, and then on Saturday morning.

They are also of opinion that the Freshmen do not usually find sufficient employment in the exercises now provided by law, which encourages them in idleness and dissipation. This they think may be remedied by introducing other books than those they have been learning at School. (*Col. Bk. 8*, p. 204, Nov. 17, 1785.)

Voted, That *Sallust* and *Livy* be introduced into the University as reciting books in the Latin Department, and that *Xenophon's retreat of the ten thousand* be introduced into the Greek Department in the room of his *Cyropædia*, and also by the study of some other science than those in which they have heretofore been instructed: and to effect these purposes they recommend—

That the Freshmen attend the Tutors as usual on Monday, Tuesday, Wednesday & Thursday; that Virgil, Tully's Orations, Caesar's Commentaries and the Greek Testament, in the most of which they are examined at the time of their admission, and which they are presumed to understand, be discontinued, and that they be taught Horace, Sallust, Cicero de Oratore, Livy, Homer and Xenophon; that the Tutors increase the quantity of the exercises so as to employ them sufficiently in the studying hours, and that they take special care so to conduct the recitations as to render it certain that the whole class have thoroughly learned them; that the Freshmen on Friday morning be instructed in the System of Rhetoric. (*Col. Bk. 8*, p. 268, Sept. 8, 1788.)

9. Voted, that an abridgement of Dr. Blair's Lectures on Rhetoric and Belles Letters be introduced by Professor Pearson into his department; and that the Students, from time to time, furnish themselves with the volume, and afterwards proceed with the art of speaking and declaiming, as usual, to the end of the year; that on Friday, at ten o'clock in the forenoon, they be taught Arithmetic by their own Tutors; that on Saturday morning they be taught Chronology and History; and that those who do not learn Hebrew attend a French Instructor at ten o'clock on Saturday, if there shall be any.

That the Sophomores attend the Tutors as usual on Monday, Tuesday, Wednesday and Thursday, and continue the Classical books they have been learning while Freshmen; that on Friday morning they be instructed in speaking, till the end of the year, notwithstanding they may before

Columbia, as the reorganized Kings College was patriotic-

that time speak in public; that at eleven o'clock on Friday they attend the Professor of Mathematics to be instructed in Algebra, and to be carried forward to other branches of the Mathematics if the time will allow; that on Saturday morning they proceed in the study of Chronology and History; that those who do not learn Hebrew attend a French Instructor, if there shall be any on Saturday at eleven o'clock.

That the Junior Sophisters continue the same Classical studies as the Sophomores with the Tutors on Monday, Tuesday, Wednesday and Thursday, taking Terence after Livy if necessary, and the Greek Testament in the afternoon, after the winter vacation; that they discontinue Doddridge on Saturday morning and attend the Professor of Divinity, to be instructed therein on Thursday at ten o'clock; that on Saturday morning they proceed in the study of Chronology and History; that those who do not learn Hebrew attend a French Instructor, if there be any on Friday at eleven o'clock.

That the Senior Sophisters continue the same studies at present on Monday, Tuesday, Wednesday and Saturday morning, and attend the Professor of Divinity, to be instructed therein, on Thursday at eleven o'clock; that on Saturday morning they proceed in the study of Chronology and History. *Accepted.*

Col. Book 8, p. 61, July 8, 1788.

Voted, that Mr. Webber, the Mathematical Tutor, be desired to give the students private Mathematical instructions; and that they be required to attend upon him at such times as the classes have been used to attend upon the Mathematical Professor, according to their respective standing, till the further orders of this Board.

2. Voted, that Mr. Webber be desired to give the Senior Class, after Commencement, such a course of Astronomical Lectures as those of that standing have been used to attend in the fall of the year for several years past.

(Col. Book 8, p. 270 ff., Oct. 16, 1788.)

The report of the Committee of the Corporation and Overseers appointed to prepare such Regulations respecting the business of future Hollis Professors of the Mathematics and natural and experimental Philosophy as they should judge necessary, consistent with the Rules and Orders of the Founder was read, together with the alterations made by the Overseers; agreeably to which amended plan.

Voted, that all arrangements heretofore made for carrying into execution the Rules and Orders of the Founder be set aside, and the following take place, viz.:

The Hollis Professor of the Mathematics, &c., shall carry the four classes forward by private lectures in the Mathematics in the following order, viz.: In Arithmetic and Mensuration—In Algebra as far as through affected quadratic equations and infinite series—In plain Geometry and Trigonometry, in the teaching of which there shall be a full explanation

ally designated, was able to move more rapidly, circumstances

of the plain Scale and Sector—In Conic Sections, as far as shall be necessary for well understanding those parts of natural Philosophy and Astronomy where these Sections are applied—In Surveying; in which branch there shall be a particular description of the construction and use of the plain Trigonometry to the mensuration of Heights and Distances, and to Navigation; with the uses of the several Instruments, and particularly, an explanation of the principles and construction of that very important instrument, Hadley's Quadrant—In Dialling—In the Projections of the Sphere—In spheric Geometry and Trigonometry, with the application of the Solution of Astronomic Problems, &c.

If any individuals among the Students choose to pursue the study of Fluxions or any other abstruse parts of the Mathematics, the Professor shall give them all proper assistance.

The Freshmen shall attend the private instructions of the Professor on Fridays, and the Sophomores on Saturdays at such hours as the President, Professors and Tutors shall direct.

The Juniors on Monday at nine o'clock in the forenoon.

The Seniors on Monday at three o'clock in the afternoon.

After the beginning of the experimental lectures, in the Spring, the Seniors shall cease to attend these instructions, and the Juniors shall attend on Mondays at three o'clock in the afternoon.

That it be recommended to the Professor, in his public lectures, which he shall deliver once a week, viz., on Wednesdays, at two o'clock in the afternoon, as has been customary, to be as systematic as may be, and to endeavor to go through a regular course on the Theory of natural Philosophy and Astronomy in four years. But this systematic pursuit shall not prevent the Professor's interesting lectures upon any important phenomena that may turn up, though they may, for a short term, interrupt the general course.

The lectures which shall be delivered in the Philosophy Chamber to the resident Bachelors and the two Senior Classes between the twenty-first day of March and the twenty-first of June, annually, shall contain a complete course of experimental Philosophy in the various branches of it; and in the progress of the Experiments, the principles and construction of the various Machines made use of shall be explained.

The Professor shall also deliver a Course of Astronomical lectures every Fall to the Senior Class, agreeably to a Plan exhibited to the Corporation, and accepted by them and the Overseers, which plan is recorded in the Corporation Book, under the Vote of May 2, 1785. And, in addition to the Articles in that Plan, he shall, under Solar Astronomy, particularly explain the Precession of the Equinoxes, the Mutation of the Earth's Axis, and the motion of the Apogee,—Under Lunar Astronomy, the Moon's Libration, and the motion of her Apogee and Nodes; and under syderal Astronomy, the Aberration of Light.

These lectures shall be considered a part of the Professor's duty, founded upon the Rules and Orders of Mr. Hollis: and he shall also,

favoring. The mercantile interests of New York would

from time to time, communicate and explain to the Students any discoveries which may be made in Philosophy and Astronomy; for all which he shall receive a fee or Special Allowance.

That the Professor be directed, while he is delivering his philosophical and astronomical lectures, to make such incidental reflections upon the Being, Perfections and Providence of God as may arise from the subjects and may tend seriously to impress the minds of the youth.

That the Professor be directed from time to time to communicate to his pupils Article 7th in the Rules and Orders of the Founder, and to inform them, that agreeably thereto, he shall devote such a proportion of his time to attend to their application for particular and familiar conversation on, and instruction in, the Subjects of their Studies in the branches of his Profession, and shall at all times encourage such applications.

The Professor, at the time of his Inauguration, after promising religiously to observe the Statutes of the Founder, shall also promise that he will, in the same manner, observe all such rules and regulations as have been, and shall be established, agreeably thereto.

(*Col. Bk. 8, p. 365, Jan. 14, 1794.*)

The Professor of Mathematics and Natural Philosophy having found himself straitened for time, in completing his course of experimental Lectures in Philosophy, between the twenty-first day of March and the twenty-first day of June,

Voted, that for the future the Professor may begin those Lectures as early in the month of March as he shall judge expedient.

(*Col. Bk. 8, p. 273, Nov. 13, 1788.*)

Voted, That Mr. Webber, the Mathematical Tutor, be desired to exhibit to the resident Bachelors and the two Senior Classes a course of experimental lectures in Philosophy the next Spring, to be begun at the usual time.

Voted, that the President be desired to give Mr. Webber such assistance in the experimental lectures as he may find convenient.

(*Col. Bk. 8, p. 323, August 30, 1791.*)

19. Whereas it appears that the exercises of the Juniors are more numerous than they can duly prepare for, while those of the Seniors are comparatively few,

Voted, that the Juniors be excused from the exercises with the Tutors at eleven o'clock, except the forensic and syllogistic disputation on two days with the logical Tutor in his week, and that in consideration of this relief they be required to perform an exercise on Friday morning through the year, which shall be in History; and that in their Senior year, in addition to their morning recitations, they recite in the afternoon till the Spring vacation, and also that they attend all the private Lectures of the Professors in Divinity, Mathematics and the English Language till the twenty-first day of June; and that the following arrangement take place:

see, in the nomination of a Professor of French, something

<i>Monday.</i>	{ After prayers, Recitation for Juniors through the year—Seniors to spring vacation. At 9 o'clock, Prof. of Oriental Lang. priv. Lect. in the Eng. Lang. to Senrs. and Junrs. alternately—Seniors to June 21. At 11 no Recitation; but syllogistic Dispute every fourth week. At 2, Prof. of Oriental Lang. public Lecture. At 4, Recitation for Jrs. through yr.—Senrs. to Spring vacation.
<i>Tuesday.</i>	{ After prayers, Recitation for Junrs. through yr. Senrs. to Spring vacation. At 10, Prof. of Divinity's priv. Lect. to Junrs. in Doddridge. At 11, no Recitation; but Prof. Div. priv. Lect. to Senrs. in Doddridge. At 2, Prof. of Divinity's public Lecture. At 4, Recitation for Junr. through year—Senr. to Spring vacation.
<i>Wednesday.</i>	{ After prayers, Recitation for Junr. through year—Senr. to Spring vacation. At 9, Prof. of Math. priv. Lect. to Senr. till June 21. At 10, Do. to Junrs. through year. At 11, no Recitation. At 2, Prof. of Math. pub. Lect. At 4, Recitation for Junrs. through year—Senrs. to Spring vacation.
<i>Thursday.</i>	{ After prayers, Recitation for Junrs. through year—Senr. to Spring vacation. At 10, Prof. of Divinity's priv. Lect. to Senr. & Junr. in Chapel—Senr. to June 21. At 11, no Recitation; but forensic Dispute every 4th week. At 4, Recitation for Junr. through year—Senr. to Spring vacation.

Exercises for the four Classes the two last days of the week.

<i>Friday.</i>	{ After prayers, Recitation for Junrs., Sophomores & Freshmen. At 10, Prof. Oriental Lang. Heb. Lect. to Sophomores. At 11, " " " " " " Freshmen. At ½ past 2, " Eng. Lect. priv. Lect. to Sophs. At 4, Prof. Oriental Eng. Lect. priv. Lect. to Freshmen.
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different, at least, from what Yale feared when Deane's let-

<i>Saturday.</i>	{	After prayers, Recitation for the 4 Classes—Senr. to Spring vacation.
		At ½ past 8, Prof. Math. Priv. Lect. to Freshmen.
		At ½ past 9, " " " " " Sophomores.
		At ½ past 10, Prof. Orient. Lang. Heb. Lect. to Junrs.
		At ½ past 11, " " " " " Fresh- men.

The three Junior Classes to attend the French Instructor on those two days as usual.

(*Col. Bk. 8*, p. 329, Dec. 9, 1791.)

Whereas, a compilation of those branches of the Mathematics which are taught in this University would be very useful for the students;

Voted, That Mr. Professor Webber be desired to select pieces from the best Mathematical Authors, making alterations and additions if he shall judge it expedient; and that Mr. Stephen Sewall be employed under his inspection to make out fair copies of such selections for the future disposal of the Corporation.

(*Col. Bk. 8*, p. 325, Sept. 27, 1791.)

6. Voted, that the two first sections in Law, 12th Chap., 3d, be repealed and the following be enacted in their stead, viz.:

To animate the students in the pursuit of literary merit and fame, and to excite in their breasts a noble spirit of emulation, there shall be annually a public examination in the presence of a joint Committee of the Corporation and Overseers and such other gentlemen as may be inclined to attend it. The Juniors and Freshmen shall be examined the day preceding the second Wednesday in April, annually, and the Seniors and Sophomores the second Wednesday in May, by the several Professors and Tutors in their respective departments, as far as each class shall have advanced the preceding year, in the following branches of literature, viz.: in the Latin and Greek Classics, the Elements of English Grammar and Rhetoric, those who study Hebrew in the Rudiments of that Language, and those who do not study Hebrew in the French language, by the French Instructor; in Arithmetic, Logic, Geography, Mensuration, Algebra, Metaphysics, plane Geometry and Trigonometry, Conic Sections, Surveying, Mensuration of Heights and Distances, Navigation, ancient and modern History, English Composition, Belles Lettres, Universal Grammar, the Elements of natural and political Law, Dialling, Projections of the Sphere, Spherical Geometry and Trigonometry, with their application to astronomical Problems, Natural Philosophy, Astronomy and Theology. And they shall be called upon to answer such questions as the President or any gentlemen of the Committee may suggest.

From the view-point of the curriculum, the following regulations in regard to students under "rustication" are interesting as showing textbooks in good and regular standing at this period:

ter was to be answered, or Harvard dreaded when heresy was

R. C. F., vol. vi, Dec. 31, 1792.

The studies Lowell is to attend to, during his suspension, are Blair's Lectures, projections of the sphere and spherical trigonometry, Ferguson's Astronomy, Burlamaqui on natural and political law, and Millat's modern history, as far as his class shall proceed in these studies.

Vol. vi, p. 169.

The studies Bartlett and Wheeler are to attend to, during their suspension, are Blair's Lectures, mensuration of superficies and solids, Xenophon and Homer, Horace and Livy, Geography, Watt's logic, and Millat's ancient history, so far as their Class shall have proceeded in these respective Collegiate exercises.

Vol. 6, p. 172. (Patch—rusticated.)

N. B. The books he is to study during his absence are Horace, Livy, Homer, Xenophon, Guthrie's Geography and Euclid, Watt's Logic, and Locke, Pike's Arithmetic, and as far as the class shall proceed in these several studies.

Col. Bk. 8, p. 353, May 14, 1793.

Voted, that Morse's Geography be introduced into the University in the room of Guthrie's.

(Ainsworth—Rusticated.)

R. C. F., vol. vi, p. 184, June 27, 1793.

N. B. The books he is to study during his suspension are Locke's Essay concerning the human understanding; Millat's Elements of Modern history; Enfield's Philosophy, Blair's Lectures, Surveying and Navigation, as far as the class shall proceed in the same time.

R. C. F., vol. vi, p. 224, May 31, 1794.

The studies to be pursued by Cabot, while under suspension, are Homer, Xenophon, Horace, Livy, Euclid, Ancient History, Locke, English Grammar, Blair's Lectures, Algebra and Geometry.

Vol. vi, p. 229, June 3, 1794.

The studies to be pursued by Corde, while under suspension, are Horace, Livy, Homer, Greek Testament, Locke, Enfield, modern History, Blair's Lectures, Navigation.

R. C. F., vol. vi, p. 298, Dec. 11, 1795.

N. B. The studies to be pursued by Chamberlain during his suspension are Horace, Livy, History, Xenophon, Homer, Euclid, Locke, Blair, Mensuration of Solids, and Algebra, as far as the Class shall proceed in the same time.

Vol. vi, p. 302, Dec. 11, 1795.

N. B. The studies to be pursued by Jewett, during his suspension, are Homer, the Greek Testament, Horace, Livy, Conic Sections, Surveying, History, Locke, Euclid, Enfield's Philosophy, Blair's Lectures, Doddridge's Lectures.

Vol. vi, p. 307, March 1, 1796.

N. B. The studies to be pursued by Everett, while under suspension,

(Continued.)

are Millat's Modern History, Burlemaqui, Ferguson's Astronomy, Blair's Lectures, Doddridge's Lectures, Spherical Geometry, and Projections of the Sphere, as far as the class shall proceed in the same time.

R. C. F., vol. vi, p. 352, June 2, 1797.

N. B. The studies to be pursued by Shease, during the time of his suspension (5 mo.), are Livy, the Greek Testament, Homer, Locke, Burlemaqui, Enfield, Millat's modern History, Blair's Lectures, English Composition, Doddridge's Lectures, Mensuration of heights and distances, and different kinds of navigation, as far as the class shall proceed.

Vol. vii, p. 10, Nov. 3, 1797. (Second suspension.)

N. B. The studies to be attended to by Shease during the time of his suspension are Enfield's Philosophy, Ferguson's Astronomy, Doddridge's Lectures, Blair's Lectures, Burlemaqui, Millat's Modern History, Dialling and other parts of the Mathematics, as far as the Class of Seniors shall proceed in that time.

A partial list of the text-books used in Yale College in the eighteenth century is as follows:

Johann Heinrich Alsted. Geometry. (Recommended to the Senior class, 1720.)

William Ames. Conscience, with the Power and Cases Thereof. (Used 1716-1726.)

William Ames. Medulla SS. Theologiae. (Used 1701-1778.)

James Atkinson. Epitome of the Whole Art of Navigation. (Used 1778.)

Hugh Blair. Lectures on Rhetoric and Belles-Lettres. (Used 1785-1800.)

Franco Burgersdicius. Institutiones Logicae. (Used 1714.)

Johann Buxtorf. Lexicon Hebraicum et Chaldaicum. (Used by Sophomores, 1716-21.)

Cicero. Orations. (Used 1714-1800; by Freshmen.)

Cicero. De Oratore. (Used by Juniors in 1774.)

Thomas Clap. Essay on the Nature and Foundation of Moral Virtue and Obligation. (Used 1765-1790.)

John Clarke. Introduction to the Making of Latin. (Used by Freshmen, 1774-1793.)

Richard Crakanthorp. Logica. (Used 1714.)

René Descartes. Compendium Logicae. (Used, in manuscript, 1721.)

William Duncan. Elements of Logic. (Used by Sophomores, 1774-1800.)

Jonathan Edwards. Enquiry into the Modern Prevailing Notions of the Freedom of the Will. (Used 1761-1777.)

William Enfield. Institutes of Natural Philosophy. (Introduced 1788; used by Juniors.)

Pierre Gassendi. Institutio Astronomica. (Recommended for Seniors, 1720.)

Willem J. S. van s'Gravesande. Mathematical Elements of Natural Philosophy. (Used 1743-1759.)

(Continued.)

William Guthrie. *New Geographical, Historical and Commercial Grammar.* (Used by Sophomores, 1774-1784.)

Nathaniel Hammond. *Elements of Algebra.* (Used by Sophomores, 1774-1781.)

Adrian Heereboord. *Logica.* (Used 1710-1714.)

John Holmes. *Art of Rhetoric Made Easy.* (Used by Sophomores, 1774-1778.)

Homer. *The Iliad.* (Read by Juniors, 1774-1800.)

Horace. (Read by Sophomores, 1774-1800.)

Bartholomaeus Keckerman. *Systema Logicae.* (Used 1714.)

Jean LeClerc. *Physica.* (Used 1725.)

John Locke. *Essay Concerning Human Understanding.* (Used 1739-1791.)

Robert Lowth. *Short Introduction to English Grammar.* (Used by Sophomores, 1774-1784.)

Johann Magirus. *Physiologia Peripatetica.* (Used 1705-1710.)

Benjamin Martin. *Philosophical Grammar.* (Used by Juniors, 1760-1787.)

Charles, Baron de Montesquieu. *Spirit of Laws.* (Used 1789-1800.)

Henry More. *Enchiridion Ethicum.* (Used 1722.)

Jedidiah Morse. *The American Geography.* (Introduced 1789.)

The New Testament, in Greek. (Used by Freshmen and Sophomores.)

Sir Isaac Newton. *Philosophiae Naturalis Principia Mathematica.* (Used 1776.)

William Paley. *Principles of Moral and Political Philosophy.* (Introduced 1791.)

Abraham Pierson. *Physica.* (Used, in manuscript, 1702-1730.)

Nicolas Pike. *New and Complete System of Arithmetic.* (Introduced 1788.)

Amandus Polanus. *Syntagma Logicum.* (Used 1710.)

Joseph Priestley. *Lectures on History.* (Used 1790-1800.)

The Psalms, in Hebrew. (Used 1701-1795.)

Petrus Ramus. *Dialectica.* (Used 1714.)

Jacques Rohault. *System of Natural Philosophy.* (Used 1725-1743.)

Wilhelm Schickard. *Horologium Ebraeum.* (Used by Freshmen, 1717-1754.)

Nehemiah Strong. *Astronomy Improved.* (Introduced 1784.)

Emmerich von Vattel. *Law of Nations.* (Introduced 1792.)

Vergil. *Æneid.* (Read by Freshmen, 1714-1784.)

Thomas Vincent. *Explanation of the Assembly's Shorter Catechism.* (Used 1774-1800.)

John Ward. *System of Oratory.* (Used 1767.)

John Ward. *The Young Mathematician's Guide—including Arithmetic, Algebra, Geometry, Conic Sections, etc.* (Used by Freshmen, 1778.)

Isaac Watts. *Logick.* (Used 1778.)

Noah Webster. *A Grammatical Institute of the English Language.* Part 2. (Used 1792.)

Westminster Assembly of Divines. *Shorter Catechism, in Latin.* (Used 1701-1726.)

supposed to find in the department of modern languages a warm friend and outspoken advocate.¹

The vote to establish in this institution seven professorships and nine "extra professorships" in the Faculty of Arts, eight professorships in the Faculty of Medicine, three professorships in the Faculty of Law, and a "Faculty of Divinity" to be formed by such professorships as may be established by the different religious societies within the State, "with the emphatic order that the different professorships in the Faculty of Arts be completed as soon as possible,"² shows that the opportunity awaiting a well organ-

John Wilson. *Trigonometry*. (Used 1778.)

William Wollaston. *Religion of Nature Delineated*. (Used by Seniors, 1746-1777.)

Johannes Wollebius. *Abridgment of Christian Divinity*. (Used 1720-1777.)

¹(Stiles' Diary, Aug. 6, 1778, Aug. 24, Aug. 29, Sept. 30.)

In Dec. 6, 1769, "Application (Harvard College, Book VII, p. 167) being made by Mr. Curtis for leave to teach French to such scholars as shall desire it, and he being recommended as a person of blameless behavior by some gentlemen at Portsmouth, where he has resided for two years past, and professing himself to be of the Protestant Religion, voted that the said Mr. Curtis be allowed to teach French to such of the scholars whose parents, by writing under their hands, shall signify their desire for that purpose to the tutors, except in the hours appointed for academical studies and exercises; and that this liberty be granted him till next spring vacation."

Probably the particular references to Mr. Curtis' behavior and religious preferences were inserted to guard against an unfortunate experience that the college underwent from a Frenchman, M. Longloissorie, who, in 1735, "disseminated certain dangerous errors in the college and who had been employed under the authority of the President and tutors as an instructor in French." As a result of this unfortunate experience the Board of Overseers decided that the President and tutors had not the power to introduce or permit any person to instruct in the college, and the right of the particular gentleman to teach French was amended. The subject seems to have dropped out of sight until the advent of Mr. Curtis. (See Quincy, vol. i, pp. 394, 395, 574.)

² The professorships that were filled were the following: In the Faculty of Arts, 1; Latin and Greek, 2; Rhetoric, 3; Geography, 4; Natural Philosophy and Astronomy, and the following "extra professorships" distinguished apparently from "professorships" by having no salary attached to them, viz.: Oriental Languages and German.

ized establishment in New York is appreciated in 1784, and the plan of education adopted in 1785 is sufficiently elaborate to be called comprehensive.

This plan is noticeable chiefly for the omission of Latin in the Freshman year except by way of translation, but "this is to be considered as an English, rather than a Latin, exercise." In the Sophomore year in addition to Demosthenes, Homer, Euripides and Sophocles, Tacitus, Sallust and Virgil, Euclid's Elements, Plain and Spherical Trigonometry, Conic Sections and the higher branches of Algebra, a course is arranged, under the Professor of Geography, three times a week, including "a description of the globe in respect of all general matters, Rise, extent and fall of ancient Empires, chronology as low as the fall of the Roman Empire, present state of the world, Origin of the present States and Kingdoms, their extent, power, commerce, religion and customs, and Modern Chronology." There is also the continuation of Latin composition, and an opportunity is afforded for a review of arithmetic and the inferior parts of algebra. In the Junior year, logic and natural philosophy are begun. Latin composition continues and "such students as wish it, may this year attend the principal course of the Professor of Mathematics a second time." The Senior year is given over to Ethics, with an historical view of the systems of the Ancient Philosophers, The Rise and Progress of Language, Universal Grammar, Rise and Progress of the Written Character and Criticism, Latin Composition, English Composition and a reading of Longinus, Cicero de Oratore and de Officiis, and also Quintilian, as directed by the Professor of Rhetoric and Moral Philosophy.¹

¹ Broadside:

THE PLAN OF EDUCATION. (1785.)

No candidate shall be admitted into the College unless he shall be able to render into English Caesar's Commentaries of the Gaellic War, the four Orations of Cicero against Catiline, the first four books of Virgil's Aeneid, and the Gospels from the Greek; to explain the government and connection of the words; to turn English into grammatical Latin; and shall understand the first four rules of arithmetic, with the rule of three.

The plan exemplifies many of the principles that found ut-

Freshman Class.

Professor of Languages—twice a day.

Xenophon's *Cyropedia*. Lucian. Demosthenes.

Professor of Mathematics—three times a week.

Vulgar and decimal fractions. Extracting the roots. Algebra as far as quadratic equations.

Professor of Logic and Rhetoric—once a week.

English grammar, together with the art of reading and speaking English with propriety and elegance.

To deliver every day to the Professor of Languages a written Latin exercise, and once a week to the President a translation out of Latin into English, in which, after expressing the sense of the author, the freedom, spirit and elegance of the translation are principally to be regarded; and the writing is to be neat and correct; this to be considered as an English rather than a Latin exercise.

Sophomore Class.

Professor of Languages—once a day.

Demosthenes, Tacitus, Homer, Sallust, Euripides and Sophocles. Virgil.

Professor of Mathematics—once a day.

Euclid's *Elements*. Plain and Spherical Trigonometry. Conic Sections. The higher branches of Algebra.

Professor of Geography—three times a week.

Description of the Globe in respect of all general matters.

Rise, extent and fall of ancient empires; Chronology as low as the fall of the Roman Empire; present state of the world; origin of the present States and Kingdoms, their extent, power, commerce, religion and customs. Modern chronology.

To continue to make Latin every day, and once a week to deliver to the President an English composition upon a subject to be assigned. Such students as happen not to be sufficiently well grounded in arithmetic, and in the inferior parts of Algebra, may this year attend that lecture of the Professor of Mathematics for a second time, for which purpose the different Professors will so arrange their hours of Lecture as not to interfere with each other.

Junior Class.

Professor of Logic and Rhetoric—once a week.

Logic.

Professor of Languages—twice a week.

terance in the original advertisement of Kings College in

Study such parts of the above and other Greek and Latin Authors as the Professor may select, upon the peculiar beauties of which he will remark, and in which they will be examined at the Quarterly examination.

Professor of Natural Philosophy—three times a week.

General properties of Matter, Laws of Motions, Mechanical Powers.... Hydrostatics, Hydraulics, Pneumatics, Optics. Astronomy, Electricity, Magnetism.

To deliver once a week, to the President, an English or Latin Composition, upon a subject to be assigned, which compositions are expected to be longer and more correct as the students advance. Such students as wish it may this year attend the principal course of the Professor of Mathematics for a second time.

Senior Class.

Professor of Moral Philosophy—three times a week.

Ethics, with an historical view of the systems of the Ancient Philosophers.

Professor of Logic and Rhetoric—twice a week.

Rise and Progress of Language—universal grammar. Rise and Progress of the written character—criticism.

To deliver, once a week, an English or Latin composition to the President upon a subject of their own choosing; and to read in their chambers such parts of Longinus on the Sublime, Cicero de Oratore, Quintilian, Cicero de Officiis, &c., as the Professors of Rhetoric and Moral Philosophy shall direct, in which they are to be examined by the Professor of Languages at the quarterly examinations, this being partly intended to prevent their neglecting the study of Languages. Such students as choose it may this year attend the lectures in Natural Philosophy for a second time.

The written exercises of each class are to be subscribed with the Author's name, and after having undergone the President's criticism are to be filed, and produced at the monthly visitations for the inspection of the Regents and Professors. . . . So many of each of the three senior classes as will bring it to each student's turn in a month are once a week to repeat in the Hall, before the President and such Professors as can attend, and their fellow students, some proper piece of English or Latin, which the President is to direct, and which, at the monthly visitations, may be such of their weekly exercises as the President may think have most merit. . . . And at the quarterly examinations so many of each of these classes will speak in public as conveniently can, if possible so that each student shall speak once a year. Once a week each Professor will examine his class upon the business of the preceding week; at every monthly visitation they will perform some public exercises, and at every quarterly

1754 and by so much illustrates the dependence of this, our first post-revolutionary program, upon the scheme prepared for the College of Mirania. It is, in fact, noticeable, as Provost Stille says, that as our collegiate program of the first quarter of the nineteenth century approaches completeness it becomes more and more identical with this ideal system, or with its practical exemplification in Philadelphia. The continued advance at this time at Columbia is in this direction. In 1789 the Professor of Mathematics and Natural Philosophy is authorized to give his instruction, in a manner closely approaching the method advised by William Smith, in a progressive course extending through three years from freshman algebra to junior fluxions, with a senior year given up to physics, "general properties of matter, laws of motion, mechanical powers, construction of machines, hydrostatics, hydraulics, pneumatics, optics, astronomy, electricity and magnetism."¹ And in 1792, the pamphlet that informs us of the "Present State of Learning in Columbia College" shows this same ideal of liberality of culture and the proportionate regard for the importance of the various subjects, including modern languages, that he advocated.²

visitation they will be strictly examined upon the whole business of the preceding quarter. (Library of the Trustees of Columbia College, Clerk's Office.)

¹ In 1789 the Professor of Mathematics and Natural Philosophy was authorized to give instruction, as follows:

Freshman Class: Twice a week. Extraction of the roots; algebra as far as cubic equations.

Sophomore Class: Three times a week. Euclid's Elements; plane trigonometry, its application to the mensuration of heights and distances of surfaces and solids; land surveying, navigation.

Junior Class: Once a day. Conic sections and other curves. Projections of the sphere; spherical trigonometry, its application to astronomy; the higher parts of algebra; the application of algebra to geometry, general principles of fluxions.

Senior Class: Once a day. General properties of matter; laws of motion; mechanical powers, construction of machines; hydrostatics; hydraulics; pneumatics; optics; astronomy; electricity and magnetism. (Van Amrindge, in *Universities and their Sons*, p. 626.)

² In 1792 the Trustees of this institution confess the necessity for Pro-

In 1810 the demonstration of the "principles" to which

fessorships of Law; Ancient and Modern History; Natural History; Chemistry; Agriculture, and other arts depending thereon; Ancient Languages and French, and at the next meeting three of these professorships are filled (viz.: 1, Natural History; 2, Oriental Languages; 3, French).

And it is Ordered: That every Professor of this College who teaches by lecture, do publish within one year a syllabus of his course of lectures, and that such as teach by recitation and examination publish a plan of this course, both to be so constructed as to point out the time employed and the number of lectures given in each. (U. & Th. Sons, p. 629.)

The pamphlet tells us that the Faculty of Arts is composed of a President and seven Professors; that the President teaches Rhetoric and English, and the Professors give instruction in:

1. *Moral Philosophy* (that seems to have included a good deal of what we should call Jurisprudence, both national and international);

2. *Mathematics*, taught as above indicated, with the addition of physics and, as a subsidiary matter, astronomy;

3. *Greek and Latin*, when a minimum of mechanical grammatical drill is required;

4. *Humanity*, which seems to have been nearly allied to philosophy in that it dealt with the opinions of the ancient world, "The whole designed to explain and elucidate ancient learning and to facilitate the acquisitions of liberal knowledge;"

5. *Oriental Languages*, where also a minimum of grammatical drill is considered necessary;

6. *Economics*, taught according to the "New French System;"

7. *French*, where double translation and pronunciation are emphasized.

The Professorship of Law appears to have dealt with Constitutional History.

Part II of the Report deals with the Faculty of Physics, but this does not properly concern our attention.

(1792).

PRESENT STATE OF LEARNING IN COLUMBIA COLLEGE.

The College consists of two Faculties: 1. The Faculty of Arts, composed of the President and seven Professors; and 2. The Faculty of Physics, comprehending the Dean and seven other Professors.

The Plan of Academic Instruction is as follows:

1. Under the Faculty of Arts.

1. The President, William Samuel Johnson, LL.D., is Lecturing in Rhetoric and Belles Lettres, and instructs the students in the Grammar and proper pronunciation of the English Language, on the plan of Webster's and Lowth's Grammars, and Sheridan's Rhetorical Grammars. In Rhetoric, on the plan of Holme's and Sterling's Rhetoric; and in Belles Lettres, on the plan of Blair's Lectures, together with such other observations and elucidations as from time to time appear necessary and expedient, so as to comprehend, as far as possible, a complete course of instruction in the Origin, Nature and Progress of Languages in general,

Columbia should give "undeviating adherence" and the

and of the English Language in particular; in the art of writing and speaking it with propriety, elegance and force—the rules and principles of every species of eloquence—the principles of true taste and the rules of just criticism, whereby the students may be enabled to judge properly of each species of composition in every branch of elegant literature, and that they may apply the whole to practice each student is obliged, every Saturday, to deliver him a composition, in which he corrects the errors, either in orthography, grammar, style or sentiment, and makes the necessary observations on them when he returns the composition to the writer.

2. Moral Philosophy is taught by Professor John Daniel Gros, S. T. D. The system of that science in Columbia College comprehends an Introductory Treatise on the different states and conditions of man—the nature of man—the powers and faculties of the human mind which distinguish him from the rest of animated nature of earth, as a moral agent accountable to God and his fellow creatures for his actions and use of those powers. Then follows a three-fold division of the course: 1. The first explaining the first Principles and Laws resulting from the nature of man, and his natural relations to God and his fellow creatures, by which human conduct ought to be regulated in a manner becoming the dignity of human nature, and conformable to the will of God. This constitutes the Law of Nature, strictly so called, and of actions good, bad and indifferent—of moral obligations—of the scope of natural laws, their extent and tendency to our happiness—of the different degrees of good, evil, merit and demerit in our actions—of moral imputations, the idea of rectitude in human conduct, rewards and punishments, and the nature of moral conscience. 2. In the second part of the system those general principles are applied to the different states, relations and conditions of man, comprehending (a) Ethics, or our duties to God, ourselves and others, (b) Natural Jurisprudence, laying down the principles of perfect and imperfect rights—the perfect obligation we owe to others—not to do an injury—to give every one his due, etc., the natural rights of preventing and defending against injuries—the natural rights of war, their nature and extent—all these rights in a well regulated state are lodged with and exercised by government. *Rights in things*: rights of property, commonly, use, usufruct, and the modes of acquiring those rights by occupancy, pact or law: natural rights of inheritance. *Rights of Persons*: slavery unnatural—the universal law of society—subordination of societies—civil society—parental and domestic societies. *Civil Government*: fundamental law of civil government—citizens, rulers and the rules—rights of sovereignty explained and exemplified—duties and obligations of citizens in respect to government—their rights, different forms, and qualities of government—distribution of powers in limited governments—ideas of constitution, convention, and final determination of the concerns of a limited government—rights of sovereignty naturally limited, and despotism naturally unlawful. 3. *The Law of Nations*, as founded in nature, makes the third part: law of peace, defence, war and neutrality—the natural rights

formulation of educational truth made in the report of the

of national intercourse—treaties of peace, alliances, armistice, sponsions, etc.,—the natural rights of territory and jurisdiction. Of this course the Professor has published an ample text book.

(This work is entitled as follows: *Natural Principles of Rectitude for the Conduct of Man in all States and Situations of Life demonstrated and explained in a systematic treatise on Moral Philosophy comprehending the Law of Nature—Ethics—Natural Jurisprudence—General Economics—Politics—and the Law of Nations.* By Johan David Gross, D. D., Minister of the German Reformed Church in the City of New York, and Professor of Moral Philosophy, Geography and Chronology in Columbia College.

"Omnes Indiae opes superat mens conscia recti."

New York. Printed by T. and J. Swords, Printers to the Faculty of Physic of Columbia College. 1795.

It was copyrighted on the 27th of August, in the nineteenth year of independence, and is dedicated "To the Regents of the University of the State of New York and to the Trustees of Columbia College," by their devoted and most obedient humble servant. The Author.)

3. The Professorship of Mathematics is at present held by John Kemp, LL.D.

The first mathematical class are taught arithmetic in a scientific manner, and algebra as far as quadratic equations.

The second class study the elements of Euclid, trigonometry, the application of trigonometry to the mensuration of liquids and distances, of surfaces and solids, land surveying and navigation.

The third class study conic sections, the doctrines of the sphere and cylinder, the projection of the sphere, spherical trigonometry, the higher branches of algebra, the doctrine of chances and annuities, the application of algebra to geometry, and the doctrines of fluxions.

There is also a Professorship of Natural Philosophy and Astronomy in the College. The course is divided by John Kemp, LL.D., into: 1. Mechanics, strictly so called; 2. Hydrostatics; 3. Hydraulics; 4. Pneumatics; 5. Optics; 6. Electricity; 7. Magnetism; and 8. Astronomy.

The different objects which belong to each of these heads are minutely treated in a set of lectures which commence in the beginning of June, and continue daily until the first of April in each year.

The college is provided with an elegant and extensive apparatus for mechanical philosophy and astronomy. There are about six hundred experiments performed each year during the course. Young gentlemen may attend any or all of the mathematical classes as well as the natural philosophy and astronomical class without regularly entering the College or being subject to any other regulations of the College than relate to those classes respectively.

A complete Syllabus of this course is ready for the press, and will be published as soon as possible.

4. The Professor of the Greek and Latin Languages is the Rev. Elijah

committee to the trustees, "That the primary principles of

D. Ratoone, A. M. Under him the Freshman class read in Greek, Lucian and a part of Xenophon; in Latin, Livy and the more difficult orations of Cicero; and every day either recite, with their other lessons, a part of Greek or Latin Grammar, or write Latin, or translate Latin into free and elegant English.

The Sophomore class finish Xenophon and read the orations of Demosthenes, the odes of Horace, and part of his satires.

The Junior class finish Horace and read Homer.

The Seniors read Longinus and Cicero *De Oratorio* and *De Officiis*.

In the lower class the chief attention is paid to make the pupils well versed in grammar and the first principles of languages; at the same time care is taken to explain the difficulties and point out the excellences of the several authors.

In the higher classes, as they are now acquainted with the rudiments of language, though these are not even now neglected, the students are instructed in the art of scanning, in ancient geography and history. The different forms and figures of speech are noticed, and comments made on the sentiments and beauties of the authors—parallel sentences quoted—particular idioms observed—and all allusions to distant customs and manners explained.

On May 7, 1794, a Professorship of Humanity was established, and lectures are delivered by Mr. Ratoone, in a regular course, on Humanity, including the opinions of the ancient philosophers, the religion, government, laws, policy, customs and manners of Greece and Rome, the whole designed to explain and elucidate ancient learning and to facilitate the acquisition of liberal knowledge.

In short, the object pursued is to make critical and useful scholars—to infuse, from those learned languages, a true taste for propriety and correctness—to teach the value of those tongues which never change nor vary, which the Professor considers as the true standards of excellence in language, and as containing generally whatever is just in thought, elegant in expression, and harmonious in numbers.

5. John Christoff Kunze is the Professor of Oriental Languages, and assists the students of Divinity, of all denominations, in their pursuits to acquire a competent knowledge of the original languages of such documents of revealed religion as belong to the Old Testament. He teaches the graduates and undergraduates of Columbia College and others who apply for the purpose at such hours as do not interfere with the usual lecture hours of the College. He endeavors to lead his scholars so far in one year as to enable them to come, by close application to books and private industry, to any degree of improvement without the further oral aid of a teacher, though he offers to all such as will attend him a second year to read, at a particular hour, one or more of the most difficult books of the Bible with them; as also to acquaint them with the principles of the related languages, the Arabic, Syriac and Chaldaic, which he considers as highly *useful*, and to a divine, whose theological knowledge aims at

all sound education are the evolution of faculty and the for-

something more than what is commensurate with the general standard of country ministers, as *necessary* and *essential*.

The Professor only expects that for such an additional hour a competent number will apply to continue a class; but for teaching the principles, he considers his appointment as obligatory to admit an individual.

As he found it difficult to procure a printed grammar in sufficient numbers in this country, and the use of different grammars would retard the progress of the students, he has brought all that is necessary and essential in the small compass of four sheets, of which each of his hearers, by degrees, takes a copy; and he flatters himself that his method hitherto has proved more compendious and more advantageous than that generally pursued. Only a few of the principal rules are to be gotten by heart, and the rest are rendered familiar by the practice.

He connects, from the beginning to the end, the practical exercises of reading and *analyzing*, with the explanation of the principles, for which purpose he chooses the *Psalms of David*, out of which he selects those verses which contain all the words occurring in them, which verses amount to no more than 564, according to Opticus and Bythnes, and he gives all the words for every talk with which the memory is to be impressed. The numbers of talks of the grammars, as well as the practical exercises described, amount to 130. Did the students regularly attend, to complete the whole, twenty-six weeks would be required, allowing five hours to a week, but experience has taught that the course commonly runs through the year. The time hitherto found most suitable is every day, Saturday and Sunday excepted, from twelve to one; the place, the Professor's house; and the commencement of the lectures, the end of the spring vacation in June.

6. A Professorship of Economics was instituted in July, 1792, and Samuel Latham Mitchell, M. D., appointed Professor. This course, of which a Syllabus is published, is conducted upon the *new French* system. A few weeks ago Mr. Mitchell gave an edition of the New Nomenclature of Chemistry in French, German and English for the use of the students. This Professorship comprises not only the classification and arrangement of natural bodies, but also treats of a great variety of facts, which form the basis of Medicine, Agriculture and other useful arts, as well as of manufactures.

This course, which it is necessary for students of Physics to attend, begins after the autumn vacation and ends in the spring, about the time the medical lectures are concluded. Any gentleman who wishes to study chemistry may attend this class without regularly entering College or performing the tasks required from students on the establishment. There is a handsome apparatus belonging to this department, and a considerable collection of fossils.

7. The Professorship of the *French Tongue* is held by Antoine Vilette Marcellin. A good pronunciation being very essential in every living language, the beginners are particularly instructed in this, and when this

mation of habit," is in the direct line of descent from the statements of the Provost, and the declaration that the aim of the college course includes "Exactness," "Punctuality," and "Progression," is one to which Smith himself would heartily subscribe.¹

is sufficiently acquired the students are gradually made acquainted with the different parts of speech, which are explained to them in a clear and concise manner, by the aid of the best grammars, founded on the decisions of the French Academy. These things being understood, they are put to the exercises corresponding to the rules they have learned, and translate, in the meantime, the French books best adapted to their proficiency and capacities into English. When they become capable of rendering them with ease and elegance, and have acquired a due knowledge of the rules of French Syntax, they are taught an easy phraseology, and made to translate English into French with propriety, particular passages of the best English authors. They are then made acquainted with the best French authors, both in verse and prose. The course of French tuition begins about the middle of June and ends in April. Though particularly destined for the students of Columbia College, other persons are likewise allowed to attend.

8. A Professorship of Law was instituted in December, 1793, and James Kent, A. M., was appointed Professor. Mr. Kent having been so recently appointed has not as yet entered upon a course of lectures, but this Professorship is intended to comprise a brief review of the history, the nature, the several forms and the just ends of civil government—a sketch of the origin, progress and final settlement of the government of the United States—a particular detail of the organization and duties of the several departments of the general government, together with an examination of such parts of the civil and criminal codes of the federal jurisprudence as shall be most susceptible of illustrations and most conducive to public utility. The constitutions of the several states and the connection they bear with the general government will then be considered, and the more particular examination of the constitution of this State. The whole detail of our municipal law, with relation to the rights of property and forms of administering justice, both civil and criminal, will be treated fully and at large.

¹ REPORT OF THE COMMITTEE OF THE TRUSTEES, COLUMBIA, FEBRUARY 28, 1810.

"It appears to your committee that the primary principles of all sound education, viz., *the evolution of faculty and the formation of habit*, although deplorably neglected in most seminaries, ought to be so thoroughly incorporated in the college system, and even amalgamated with its very elements, as to render progress through the classes, without due regard to it by both teacher and pupil, altogether impracticable. If the plan be so constructed as to require ability and diligence, the want of either of these

The course of study arranged at this time, with its faculty of five professors to impart it, includes Latin and Greek; Rhetoric and Belles Lettres; Mathematics and Natural Philosophy; Geography, Chronology and History; and the Science of Mind and Morals with the Principles of Public Law, and thus reveals a completeness of organization and a grasp of the edu-

qualifications in the teacher will betray itself in the embarrassment of his department, and the want of either of them in the pupil will be discovered by his habitual failure in duties which a reasonable share of both would have fitted him to perform. Your committee cannot, for a moment, suppose that it is the intention of the Board to try that most fruitless and mischievous experiment—the experiment of educating either the naturally stupid or the incurably idle. A volume could not display the magnitude of the injuries inflicted upon letters, upon religion, upon morals, upon social prosperity under every form, through the protection granted to incapacity and sloth by a timid indulgence or a chimerical hope. It is, therefore, indispensable that the public should see, and the youth themselves feel, that future students must both have faculties to cultivate and industry to labor in their cultivation, or that Columbia College will have no place for them.

“With sufficient reserve for improvements which the vigilance of skillful instructors may point out in the practical details, your committee think that there ought to be an undeviating adherence to the following principles and these general applications:

“1. Exactness. By which is understood the learning perfectly whatever is professed to be learned at all.

“2. Punctuality. By which your committee means that the performance of all exercises should be limited to a certain time, and then be vigorously exacted.

“3. Progression. By which your committee would express a qualification of exercises, from easier and shorter to more difficult and ample, according to the power of performance.

“During the whole course of education the youthful faculties are to be kept upon the stretch. As they develop themselves and gain strength, they are to be employed in work demanding severer tension and more dauntless rigor. As in mathematical science every preceding proposition is an instrument in the demonstration of those which follow, so in all branches of education everything which being learned is an *end*, becomes, when learned, a means, and is to be applied, in its turn, to the remoter and obscurer investigations. On no account, therefore, ought students in the more advanced classes to spend their time in those elementary studies which occupy beginners. It is the impoverishment of intellect—it is a waste of life—it never can be necessary unless the necessity be created by some mismanagement in the system.”

cational problem involved in establishing a curriculum that the advocate of the original program would certainly appreciate. When we find the next year, "That the students shall be habituated, in so far as it shall be practicable, to study *subjects* rather than whole *books* and that the Professors shall direct them to the best helps" the general idea contained

The resolutions adopted to carry into effect the recommendations of the committee prescribed a course of study for each of the classes.

1st. That the studies of the different classes be arranged as follows:

First year a Freshman class; Professor of Languages: Cicero's letters to Atticus, Sallust entire, Horace's Satires, Dalzel's collections *majora*, Xenophon's *Memorabilia*, Kent's Lucian—double translation—Latin verse—Roman Antiquities. Rhetoric and Belles Lettres: English Grammar and Reading, English Composition, Declamations in English. Mathematics: Euclid's Elements. Geography.

Second year, or Sophomore class; Professor of Languages: Virgil's *Georgics*, Livy, Horace's Odes and Epistles, Demosthenes, Homer, Herodotus, Greek and Roman Antiquities, double translations—Latin Composition in prose and verse. Rhetoric and Belles Lettres: Elements of Rhetoric, English Composition, Declamations in English and Latin. Mathematics: Plane Trigonometry and its applications, Algebra. Geography and History: Geography, History and Chronology.

Third, or Junior year; Professor of Languages: Cicero de Oratore, Terence, Quintilian, Horace the second time, Longinus, Sophocles, Greek and Roman Antiquities—double translation—Latin and Greek Composition in prose and verse. Rhetoric and Belles Lettres: English Composition, criticism, illustrations from the best poets and prose writers, Declamations—the pieces to be of the students' own composition. Mathematics: Spherical Trigonometry, Conic sections, Natural Philosophy, Geography and History: Geography, History and Chronology. Science of Mind, Elements of Ethics.

Fourth year, or Senior class; Mathematics: Natural Philosophy, Astronomy, Fluxions. Rhetoric and Belles Lettres: English Composition, Criticism of approved writers, Universal Grammar, Declamation. Science of Mind and Morals: Analysis of Intellectual Powers, Principles of Reasoning, Law of Nature and Nations. No student to deliver at Commencement any Speech or Piece which shall not be of his own composing.

"Professorship of Chemistry was assigned to the Faculty of Medicine and detached from the Faculty of Arts, which was thereafter to consist of five professors, one each in the following departments: Greek and Latin Languages, including the Greek and Roman Antiquities; Rhetoric and Belles Lettres; Mathematics and Natural Philosophy; Geography, Chronology and History; the Science of Mind and Morals, with the Principles of Public Law." (U. & Th. Sons, p. 638.)

in the detailed list of books for private study in Dr. Smith's program seems to be repeated.¹

¹ The Statutes of 1811, Chapter III, p. 7.

"The Faculty of Arts shall be composed of four Professors, viz.:

A Professor of the Greek and Latin Languages.

A Professor of Rhetoric and Belles Lettres.

A Professor of Mathematics and Natural Philosophy.

A Professor of Moral Philosophy.

2. The Professors shall take rank of each other according to the dates of their appointment respectively.

3. The Professors shall conduct their course of instruction according to the principles contained in the Reports of a committee of the Trustees under the dates of the 6th of February, 1809, and the 27th of February,

1810.

4. The students shall be habituated, in so far as it shall be practicable, to study subjects rather than whole books, and the Professors shall direct them to the best helps."

OF THE COURSE OF STUDY.

The course of study in the different classes shall be as follows, viz.:

FIRST YEAR—OR FRESHMAN CLASS.

Professor of Languages.

Cicero's Letters to Atticus, Sallust entire, Horace's Satires, Dalzel's Collectanea Majora, Xenophon's Memorabilia, Kent's Lucian, double translation, Latin verse, Roman Antiquities.

Rhetoric and Belles Lettres.

English grammar and reading, English composition, Declamations in English.

Mathematics, etc.

Euclid's Elements, Geography.

SECOND YEAR—OR SOPHOMORE CLASS.

Professor of Languages.

Virgil's Georgics, Livy, Horace's Odes and Epistles, Demosthenes, Homer, Herodotus, Greek and Roman Antiquities, Double translation, Latin Composition in prose and verse.

Rhetoric and Belles Lettres.

Elements of Rhetoric, English Composition, Declamations in English and Latin.

Mathematics, etc.

Plane Trigonometry and its applications, Algebra, Geography.

THIRD YEAR—OR JUNIOR CLASS.

Professor of Languages.

Cicero de Oratore entire, Terence, Quintilian, Horace the second time,

In fact, from this time onward until the mid-century the definition of the college curriculum at Columbia is but a repetition of all of these statements. Details vary, as in 1817, when an adjunct professor in the classics is appointed, and, in 1820, when the professorship of Mathematics and Natural Philosophy is divided into a Professorship of Mathematics and Astronomy and a Professorship of Natural and Experimental Philosophy and Chemistry, but the general character of the course is maintained according to the lines already laid down, and the ideal appears to have remained, as stated in the concluding paragraph of the report of 1810, which emphasizes the importance of the *development* of the student. This, it will be remembered, is the keynote of the Outline for the College of Mirania.

"During the whole course of education the youthful faculties are to be kept upon the stretch. As they develop themselves and gain strength, they are to be employed in work

Longinus entire, Sophocles, Greek and Roman Antiquities, Double translation, Latin and Greek Composition in prose and verse.

Rhetoric and Belles Lettres.

English Composition, Criticism, Illustrations from the best poets and prose writers, Declamations—the pieces to be of the students' own composing—History and Chronology.

Mathematics, etc.

Spherical Trigonometry, Conic Sections, Natural Philosophy, Geography.

Moral Philosophy.

Elements of Ethics.

FOURTH YEAR—OR SENIOR CLASS.

Languages.

The classical part of the course for this year to be conducted by the Provost, in such manner as he shall judge proper.

Mathematics, etc.

Fluxions, Natural Philosophy, Astronomy.

Rhetoric and Belles Lettres.

English Composition, Criticisms of approved writers, Universal Grammar, Declamations, History and Chronology.

Moral Philosophy.

Analysis of Intellectual Powers, Principles of Reasoning, Law of Nature and Nations.

demanding severer tension and more dauntless rigour. As in mathematical science every preceding proposition is an instrument in the demonstration of those which follow, so in all branches of education, everything which being learned, is an *end*, becomes, when learned, a means, and is to be applied, in its turn, to the remoter and obscurer investigations. On no account, therefore, ought students in the more advanced classes, to spend their time in those elementary studies which occupy beginners. It is the impoverishment of intellect, it is a waste of life, it never can be necessary unless the necessity be created by some mismanagement in the system.”¹

¹ STATUTES OF COLUMBIA COLLEGE, REVISED AND PASSED BY THE BOARD OF TRUSTEES, MARCH, 1821.

Of the Course of Study.

The course of study in the different classes shall be as follows, viz.:

FIRST YEAR—FRESHMAN CLASS.

Sallust entire, such of the Orations of Cicero and such books of Livy and of the Odes of Horace as the Adjunct Professor of Languages with the consent of the President shall direct, Dalzel's *Collectanea Graeca Majora*, Latin Prose Composition, Roman Antiquities.

The Elements of Geometry, Algebra, Ancient and Modern Geography.

SECOND YEAR—SOPHOMORE CLASS.

Virgil's *Georgics*, the *Satires* and *Epistles* of Horace, Cicero de *Senectute* et de *Amicitia*, and such parts of Tacitus as the Professor with the consent of the President shall direct, Dalzel's and Dunbar's *Collectanea Graeca Majora*, Homer's *Iliad* to follow *Graeca Majora*, Latin Composition in prose and verse as the Professor of Languages shall direct, Greek and Roman Antiquities.

Elements of Geometry continued, Plane Trigonometry and its applications, Algebra, Geography, Ancient and Modern.

English Grammar—studied critically—on the principles of Universal Grammar, Elements of Rhetoric and Oratory, Theory and Practice of English Composition, Outline of History—Ancient and Modern—with Chronology.

THIRD YEAR—JUNIOR CLASS.

Cicero de *Oratore* and de *Officiis*, Terence, Horace's Art of Poetry, Longinus entire, Homer's *Iliad* continued, Latin Composition in prose or verse as the Professor of Languages shall direct, Greek and Roman Antiquities.

Spherical Trigonometry, Conic Sections, Analytic Geometry, Fluxions, Natural Philosophy, including Chemistry.

Principles of Taste and Criticism, A Course of Criticism—including the

Taking but a partial view of the collegiate situation we might now infer that the course of evolution of the curriculum was to be direct and immediate. But the conditions at Columbia seem to have been exceptional. The course of study had elsewhere a different history. The facilities for intercourse between the various establishments were meagre and the members of the teaching force in the respective colleges had little leisure and less money to spend in travel. The consequence was that the customs and practices of each organization were fixed by its own traditions. Rhode Island College for some time reproduces the curriculum of Dr. Finley, who was President of Princeton when James Manning, the first executive of the younger institution, graduated. Its laws, as published in 1783, return to the "time honored" program with arithmetic and algebra, Euclid and Trigonometry, surveying and navigation, in the Junior year, though vulgar arithmetic is required for entrance, and in the Senior

classical works—ancient and modern, Theory and Practice of English Composition, A General History of the Literature of Europe—ancient and modern, A Critical History of English Literature.

FOURTH YEAR—SENIOR CLASS.

The classical part of the course of this year to be conducted by the Professor of Languages, in such manner as he, with the consent of the President, may direct.

Fluxions, Natural Philosophy—including Chemistry, Astronomy according to the methods of Morton, of La Place and La Grange.

History of Philosophy, Intellectual and Moral Philosophy and Political Economy.

The Senior Class to read essays in English, of their own composition, once a week, before the President and in the presence of the class, upon such subjects as the President may direct, which essays shall be subject to the criticism of the President, to be delivered in the presence of the class.

N. B. In the classical department, when it is not expressly mentioned that the book is to be read *entire*, it is to be understood that the whole, or such parts of the book, or authors, are to be read, as the Professor, with the consent of the President, shall direct.

Declamations and Forensic Disputations to be continued through the Sophomore, Junior and Senior years at stated periods, and upon subjects connected with their respective courses.

year an elaborate review of the languages, arts and sciences studied in the entire course is provided.¹

¹ THE LAWS OF COLLEGE, 1783, FEBRUARY 22.

CHAPTER I. *Concerning Admission into College.*

1. No person may expect to be admitted into this college unless, upon an examination by the President and Tutors, he shall be found able to read accurately, construe and parse Tully, Virgil and the Evangelists in the Greek Testament, and shall be able to write *true* Latin in prose and hath learned the rules of Prosody and vulgar Arithmetic; and shall bring suitable testimony of a blameless life and conversation.

CHAPTER 2. *Concerning Scholastic Exercises.*

3. The President and Tutors, according to the best of their discretion, shall teach and instruct the several classes in the learned languages and the liberal arts and sciences, together with the vernacular tongues. The following are the classes appointed for the first year: In Latin, Virgil, Cicero's Orations, and Horace, all in using Delphini; in Greek, the New Testament, Lucian Dialogues and Xenophon's Cyropedia. For the second year: In Latin, Cicero de Oratore and Caesar's Commentaries; in Greek, Homer's Iliad and Longinus on the Sublime, together with Louth's Vernacular, Grammar, Rhetoric, Ward's Oratory, Sheridan's Lectures on Elocution, Guthrie's Geography, Kairn's Elements of Criticism, Watt's & Duncan's Logic. For the third year: Hutchenson's Moral Philosophy, Doddridge's Lectures, Fenning's Arithmetic, Hammond's Algebra, Stone's Euclid, Martin's Trigonometry, Love's Surveying, Wilson's Navigation, Martin's Philosophia Britannica, and Ferguson's Astronomy, with Martin, on the Globes. In the last year: Locke, on Understanding, Kennedy's Chronology and Bollinbroke, on History, and the Languages, Arts and Sciences studied in the foregoing years to be accurately revised.

4. During the two first years such Latin exercises shall be exhibited as shall be directed by their respective teachers, and throughout the two last years weekly Disputations shall be held on such subjects as shall be previously assigned them, both in the forensic and syllogistic way, as shall be judged most conducive to their improvement.

5. Two of the students in Rotation shall, every evening after Prayers, pronounce a piece upon the stage, and all the members of the college shall meet every Wednesday in the afternoon in the Hall, at the ringing of the bell at 2 o'clock, to pronounce before the President and Tutors pieces well committed to memory, that they may receive such corrections in their manners as shall be judged necessary.

6. On the last Wednesday in every month every student in college shall pronounce publicly on the stage, memoriter such an Oration or Piece as shall be previously approved by the President, on which occasion the two upper classes shall make use of their own composition.

7. No student may read any book in the hours of study excepting the

In 1793, Arithmetic is moved to the Sophomore year, and the *review* is limited "to such parts of the authors studied in the preceding years as the officers of the College shall direct." There is some change in the order of the classical books, but there is nothing essentially different in the two programs, and the dependence of both on the experience of Princeton will be clearly evident.¹

classics, or those which tend to illustrate the subject matter of his recitation for the time being.

10. It is not permitted anyone, in the hours of study, to speak to another, except in Latin, in the college or in the college yard.

11. The Senior class shall attend recitations and other public exercises until the second Wednesday in July, on which they shall appear in the Hall to be examined by the President, fellows, tutors, or any other gentlemen of liberal education, touching their knowledge or proficiency in the learned languages, the liberal arts and sciences, and other qualifications requisite for receiving the Degree of Bachelors in the Arts; and upon approbation, they shall not leave the college before they have completed their necessary preparations for the public Commencement, nor without the President's liberty (of the President) P. 95, V. B.

12. On the last Wednesday in every quarter there shall be a public examination of the three lower classes on the studies they shall have pursued during that quarter, and if it shall appear that anyone has neglected his business, so as not to have made such proficiency in them as his opportunity and abilities would admit of, the President and tutors may put him upon a conditional standing with his class, which conditions shall continue to the end of the year (unless by his better conduct he shall merit an exemption therefrom, at a future examination) and then if there appear no hopeful signs of reformation, they may disgrade him to a lower class.

At the close of MS.

The subscribers having been appointed a committee to form a Digest of Laws for this Institution, have agreed to the foregoing, and do report them accordingly this 22d day of February, 1783.

Signed, JAMES MANNING,
JABEZ BOWEN,
NICHOLSON BROWN,
DAVID HOWELL.

¹(THE LAWS OF RHODE ISLAND COLLEGE, 1793.)

3. The following books shall be studied by the respective classes, and shall be continued in use until others shall be introduced by a majority of the officers of instruction and at least three of the Fellowship.

In the first year shall be studied: In Latin, Virgil's Aeneid, Cicero's Orations, and Horace; in Greek, the New Testament, and Xenophon's

We find the same outline again repeated in the Laws of 1803

Cyropaedia; in English, Sheridan's Lectures on Elocution, and Webster's Grammatical Institute of the English Language.

In the second year: In Latin, Cicero de Oratore; in Greek, Longinus de Sublimitate, Guthrie's and Morse's Geography, Decimal Arithmetic, the extraction of the square and cube roots, Watt's Logic, and Hammond's Algebra.

In the third year: Euclid's Elements, Trigonometry—with its application to surveying and navigation, Ferguson's Astronomy, Nicholson's Natural Philosophy, Paley's Moral Philosophy, and Kaim's Elements of Criticism.

In the fourth year: Locke on the Human Understanding, and such parts of the authors studied in the preceding years as the officers of College shall direct, together with some select parts of history.

And that the students may accomplish themselves in the art of reading, they shall, at such times as the President shall direct, prepare and read before the officers of instruction select pieces of English composition; and any student who shall particularly distinguish himself by reading well at the public examinations shall, as a mark of honor, have his name entered on the records of the college.

4. It shall be the business of one instructor to teach the learned languages, and elements of history; of another to teach logic, metaphysics and moral philosophy; of another to teach criticism, geography, and natural philosophy. The Professor of Mathematics and Astronomy shall teach arithmetic and astronomy. The Professor of Experimental Philosophy shall deliver a complete course of lectures on that subject, and exhibit experiments to the two upper classes—the course to begin on the first week in April, annually.

5. There shall be three recitations of the two lower classes every day, except that on days for speaking the afternoon recitation may be omitted. On every Saturday, at eleven o'clock a. m., the instructors shall examine the several classes on their studies during the foregoing week, and on Saturday afternoon there shall be no recitation. The junior sophisters shall recite three times each day as above, until the spring vacation, and after that but twice a day. The senior sophisters shall recite twice each day until the first of April, and from that time once each day until the second Wednesday in July.

6. The times for recitation shall be as follows: The first immediately after morning prayers, the second at eleven o'clock a. m., the third at four o'clock p. m., from the fall to the spring vacation, and at half after four from the spring vacation to September.

7. During the first year there shall be exhibited such Latin exercises on every Saturday morning as the instructors shall direct. During the second and third years there shall be exhibited in the vernacular tongue, every Saturday morning, compositions and disputations, on subjects previously appointed by the officers of instruction. In the senior year, until

with the addition of Millat's General History during senior year.¹

the spring vacation, compositions and disputations on subjects chosen by the students shall be exhibited weekly, as above directed.

8. There shall be three public exhibitions on the stage in the College Chapel in each year; the first, on the last Wednesday in December, by the Senior Class; the second, on the last Wednesday but one in April, by one-half of the juniors and sophomores; and the third, by the other half of the juniors and sophomores, on the last Wednesday but one in August. If any student shall absent himself on the day of public speaking, or neglect to prepare himself by having his piece well committed to memory, he shall be fined not less than two shillings, nor more than nine.

If any student shall presume to exhibit anything on the stage, which has not been previously inspected and approved by an officer of instruction, he shall be liable to a fine of not less than three shillings, and to be publicly admonished before the audience. Any student shall be liable to the same punishment who shall use any profane or indecent language on the stage; and no student shall be permitted, on any pretence whatever, to make any alteration in his dress, in order to personate any particular character; and the students are strictly forbidden to make any disturbance on the days of exhibition, by entertaining company in their rooms.

11. Two of the students shall speak pieces on the stage every evening after prayers (except on Wednesdays, Saturdays and Sundays) beginning with the alphabet, in the senior class, and proceeding in that order through the two upper classes. No student shall choose any piece for this exercise which has a tendency to excite laughter, under the penalty of one shilling for every offence.

14. It shall be the duty of the senior class to collect, prepare and publish theses in Latin. At the commencement of the senior year the class shall choose by ballot, at such time as the President shall direct, two of their members, to one of which each member in the class shall deliver every week two theses in Latin and English. These shall be transcribed into a book, with the name of the student subscribed; the theses shall be presented to the Presidents and Tutors two weeks before the second Wednesday in July. Should any student neglect to furnish his theses he shall be fined six pence for every neglect, and if the neglect be repeated he shall be liable to lose his degree.

The complete hold that this method of the Cambridge Colleges (Harvard, Yale, Princeton) had over the program is to be seen in the subjects for the theses prepared by the students at graduation. These made in Rhode Island, when compared with the collection of those at Harvard, during the Presidency of Dr. Chauncey, as published by the Colonial Society of Massachusetts, shows how little the ideal of the course of study had altered in these institutions in the intervening years.

Those of Brown are for the years 1769, 1789, 1794, 1803, 1808, 1811.

¹(THE LAWS OF RHODE ISLAND COLLEGE, 1803.)

No person shall be admitted into this College unless upon examination

This text book had already been introduced into Harvard, but the subject occupies quite a subordinate position. It is wholly taught by the tutors. The prominent place in the curriculum in these institutions that had once honored Divinity is now being taken by the classics. Though these colleges boasted of their newly acquired apparatus for exploiting physical science and enjoyed the novelty of exhibitions of chemical experiments attention is chiefly directed toward perfecting instruction in Latin and Greek. Dr. Samuel S. Smith, President of Princeton (1795-1812) is quoted, in a private letter, as advising a father to give his son "a solid foundation of the Greek and Latin languages, as they are beginning

by the President, or in his absence, one Professor and two at least of the Tutors, he shall be found able to read accurately, construe and parse Cicero's Orations, Virgil's Aeneid and the Greek Testament, and to write Latin grammatically. He shall have learned the rules of Vulgar Arithmetic, also be able to produce satisfactory credentials of his good moral character.

3. The following books shall be studied by the respective classes, and shall be continued in use until others shall be introduced by a majority of the officers of instruction and at least three of the Fellowship.

In the first year shall be studied: In Latin, Virgil's Aeneid, Cicero's Orations and Horace; in Greek, the New Testament and Xenophon's Cyropaedia; in English, Sheridan's Lectures on Elocution and Murray's English Grammar.

In the second year: In Latin, Cicero de Oratore; in Greek, Longinus de Sublimitate; Guthrie's and Morse's Geography, Decimal Arithmetic, the Extraction of the Square and Cube Roots, Watts' Logic, Blair's Lectures and Hammond's Algebra.

In the third year: Euclid's Elements, Trigonometry, with its application to surveying and navigation; Ferguson's Astronomy, Nicholson's Natural Philosophy, Paley's Moral Philosophy and Kames' Elements of Criticism.

In the fourth year: Locke on the Human Understanding, Millar's Elements of General History, and such parts of the authors studied in the preceding years as the officers of the College shall direct.

And that the students may accomplish themselves in the art of reading, they shall, at such times as the President shall direct, prepare and read before the officers of instruction select pieces of English composition, and any student who shall particularly distinguish himself by reading well at the public examinations shall, as a mark of honor, have his name entered on the records of the College.

4. It shall be the business of one instructor to teach the learned languages and elements of history; of another, to teach Logic, Metaphysics, Moral

to be greatly neglected, though they are of the utmost importance and greatest consequence," and the student through whom this advice is transmitted evidently reflects the President's thought when he writes:

"Know then that the present is the most important period of your life. Your mind is as yet flexible and very susceptible of impressions, and such impressions as it now receives such they will remain, or at least not to be worn off in a short space of time. Let me tell you that you cannot expect to raise a permanent and elegant edifice unless you lay a firm foundation, unless you build

Philosophy; of another, to teach Criticism, Geography and Natural Philosophy. The Professor of Mathematics and Philosophy shall, in the summer term, deliver a course of lectures, and exhibit experiments on Natural Philosophy to the two upper classes.

5. There shall be three recitations of the two lower classes every day, except that on days for speaking the afternoon recitation may be omitted. On every Saturday, at eleven o'clock a. m., the instructors shall examine the several classes on their studies during the foregoing week, and on Saturday afternoon there shall be no recitation. The junior class shall recite three times each day as above, until the spring vacation, and after that time but twice each day. The senior class shall recite twice each day until the first of April, and from that time once each day until the second Wednesday in July.

6. The times for recitation shall be as follows: The first immediately after morning prayers; the second at eleven o'clock a. m.; the third at four o'clock p. m., from the fall to the spring vacation, and at half after four from the spring vacation to September.

7. During the first year there shall be exhibited such Latin exercises, on every Saturday morning, as the instructors shall direct. During the second and third years there shall be exhibited in the vernacular tongue, every Saturday morning, compositions and disputations, on subjects previously appointed by the officers of instruction. In the senior year, until the spring vacation, compositions and disputations, on subjects chosen by the students, shall be exhibited weekly as above directed.

14. It shall be the duty of the senior class to collect, prepare and publish theses in Latin. At the commencement of the senior year the class shall choose by ballot, at such time as the President shall direct, two of their members, to one of which each member in the class shall deliver every week two theses in Latin and English. These shall be transcribed into a book, with the name of the student subscribed; the theses shall be presented to the President and Tutors two weeks before the second Wednesday in July. Should any student neglect to furnish his theses, he shall be fined six pence for every neglect, and if the neglect be repeated, he shall be liable to lose his degree.

upon a rock which will not yield to the injuries of time. To do this you must apply yourself with the greatest assiduity. Nothing honorable or praiseworthy is to be obtained from things that come without labor.

"Best to strengthen and exercise the mind * * * * Nothing is better to do this than the Latin and Greek Lang., Mathematics and Metaphysical disquisitions; But Latin and Greek I would wish first and more immediately you to apply yourself, the others will be an object of your study perhaps in a year or two hence. I wish you not to fall into a mistaken notion that languages are of no great importance. This indeed is the opinion of many of our modern superficial declaimers, but it rather is the result of ignorance or only a cloak for idleness, as it requires great labours to obtain an accurate or even a superficial knowledge of them. But depend upon it they are the first stones that should be laid in the foundation of a strong character. They not only give strength and energy to the mind, but they are the foundation of the English Language and to understand the latter you must be acquainted with the former.

"The advantage to be derived from them you perhaps will not at first perceive, but in time you will be sensible of their good. Remember the ancient Grecians and Romans when they wished to form good soldiers did not draw them up and parade them on particular occasions, they had none of our modern battalions which now seem to be so necessary but they advised their men in pitching the quoit, in boxing, in wrestling, scaling walls, in swimming and by this means formed their physique.

"Would that this was done now a days. * * * * *

"The dangers and bad effects resulting from an early perusal of Deistical and Atheistical and all other immoral writings, and the ill effects that Romance and fictitious history have upon the mind and how much they should be guarded against in the early part of life, before one arrives at maturity, shall be the subject of my next letter. No more at present but remain,

"Your affectionate Brother."

This correspondence,¹ carried on by these two boys, who successively enter Princeton and graduate, gives vitality to the

¹ Loaned Princeton Library.

facts pertaining to the college course here at the opening of the nineteenth century. We find in it allusions to preparatory work, examinations, and the books studied. The earliest letter is dated, May 30, 1790, when the elder boy is still in preparatory school. The last is dated February 23, 1807, when the youngest son is studying law. The elder says he is (July 31, '99,) studying "with great rapidity and diligence."

"I together with my class stood an examination on thursday and fryday last on all the languags which I finished in about two weeks after that I entered college, also all Roman Antiquities committed to memory verbatim, 50 pages of English Grammar, Part of Geography and all Arithmetic." * * * "I am now studying Geography which I shall finish against fall. I have just begun Algebra."

January 19, 1800. "I am now studying the elements of Geometry with which I am very much pleased, and conceive to be the great basis of knowledge."

May 23, 1800. "I am now studying the mathematics together with Blair's lectures on Criticism."

April 7, 1800. "Please to put Duncan's Logic in the trunk."

December 21, 1800. "One day while he (Dr. Smith) was speaking to the class with regard to the manner in which children were educated in modern times and particularly in America he said that there was never a sufficient attention paid to the Greek and Latin languages; that every person at the age of 15 or 16 should be acquainted with all Latin and Greek authors that could be read; that it was the first basis upon which a proper education could be built. And, indeed, the more experience I myself get the more of their importance I see and I am led to believe that I shall make them a private study when I quit college."

The elder never seems to object to the course.

DEC. 21, 1800.

"I have this session been studying Logic and Natural Philosophy, two studies with which I am very much pleased, but they at the same time require incessant study."

We learn that the younger was evidently "lucky," in students' phrase, in his examination for entrance.

PRINCETON, MAY 17, 1803.

Dear Father:

I arrived here on Tuesday, the 10th instant, and on Wednesday I stood, together with four others, a severe and close examination for about five hours. We were examined on Horace, Lucian, Arithmetic and Kennet's Antiquities and should have been in English Grammar. My being admitted into the Sophomore class was not owing so much to my real knowledge as to my own dissemblance and presence of mind and the benevolence of Dr. Thompson whose favour I had acquired beforehand. But now I am advanced to severe study for instead of fifteen lines in Lucian I have to recite fifty or sixty in Xenophon, a book which I never saw until I came here, and instead of forty in Virgil have about 600 in Horace which I have not read since I left Bradley. Besides 268 pages in Kennett which the class have gone over I must get in private and the rules in English Grammar which must be given verbatim. But all things will have an end and I hope an end will be to this (God assisting) in one or two months.

PRINCETON, JULY 2, 1803.

Dear Father:

Our examination commenced on the 20th instant and lasted four days. You will have no difficulty in guessing my terror and application as it approached. Considering my deficiency in several of the studies upon my entrance and not having perfectly supplied that deficiency I was greatly terrified and studied incessantly. On the day appointed I repaired with a trembling hand and palpitating heart to the public hall and after the conclusion of the examination I heard six persons mentioned as bad and myself numbered with the good. This gave me great joy and removed my fears and now I am almost on an equal footing with the rest of the class, having together with some others about 120 pages of English grammar to get privately for the fall examination. Our class will begin immediately to study Algebra in which I think my superior skill in Arithmetic will be of some advantage to me * * * *

PRINCETON, DEC. 19, 1803.

Dear Father:

We are now studying **the** Mathematics which is the most pleasing we will have while at college.

I have abundance of time to improve **myself** reading.

PRINCETON, FEB. 17, 1804.

Dear Father:

We have lately had an examination here at which all went well. We have finished the studies of Algebra and Geometry, and Trigonometry is now the object of our acquirement. Algebra appears to me to be an important study and the faculty are increasing the number of our studies almost daily, yet Algebra is passed over with a slight study of the beginning. I take great delight in the mathematics in general and get them without much trouble for I have read about 18 or 20 volumes this session among which is the Spectator.

From these letters and also from a pamphlet issued in 1803 and signed by President Smith we observe that the curriculum has made no special advance here from the one we have last considered. Sallust, Cicero, Greek Testament, Lucian and Arithmetic are the studies of freshman year. From the letters just quoted we see advanced Mathematics and the Sciences are studied. The pamphlet enumerates Speculative and Practical Mathematics, Natural Philosophy, Astronomy, Chemistry and Natural History, Elements of Logic, Belles Lettres, History and Moral and Political Science.¹

¹ 1803.

COLLEGE OF NEW JERSEY.

"The trustees of the College of New Jersey are happy to announce to the Public the perfect restoration of the College Edifice lately destroyed by fire, with many improvements in its structure calculated to guard against a like calamity in the future. (Burned in March, 1802.)

"The establishment of the College consists of a President, who is also Professor of Moral Philosophy, &c., four other Professors, and two tutors, under whom is appointed a teacher of French, for the benefit of those who are desirous of acquiring that language, and who can redeem time for that purpose from their ordinary classical studies.

"In order to enter the Freshman class it is necessary to have read the

The ancient devotion to divinity is renewed in the declaration that: "It is considered by the trustees as an object of primary importance in the course of education, to impress upon the minds of studious youth just sentiments of the nature as well as a full conviction of the truth of religion, as being the surest basis of the public morals," and in 1819 special mention is made of the fact that "Instruction in the Holy Scriptures,

Evangelists, or other equivalent portions of the Greek Testament, and to be acquainted with the Latin authors usually read in the schools as far as the Aeneid of Virgil. . . . To enter the Sophomore class it is necessary farther to have read Sallust, Cicero's Orations, the Greek Testament, Lucian's Dialogues, and to understand vulgar Arithmetic. The lower classes are entirely occupied in the study of the Latin and Greek Languages, of Arithmetic, Geography and the Roman Antiquities, under the direction of the Professor of Languages with the assistance of the Tutors, except on Sundays, when they are employed in studying the history of the Bible, and the Principles of the Christian Religion, agreeably to the tenets of the respective churches to which they belong. . . . These classes, on account of the extreme youth of the greater part of the young gentlemen who compose them, are required to study, during the whole day, under the immediate eye of their Professor and Tutors. For this purpose large, convenient, well lighted and airy apartments have been provided.

"The members of the superior classes are permitted to study in their private chambers, except in those hours in which they are required to attend halls of recitation and lecture. On Sundays, after the public worship is ended, the Junior Class attends Lectures by the Professors of Theology, calculated to explain the difficulties which occur in the sacred writings, and refute the objections which have been made against particular parts of them, by the aids of History of Antiquities and the Principles of sound Criticism. The Senior Class attends Lectures on the Evidences of Natural and Revealed Religion. . . . It is considered by the trustees as an object of primary importance on the course of education to impress upon the minds of studious youth just sentiments of the nature, as well as a full conviction of the truth, of religion as being the surest basis of the public morals. On the remaining days of the week these classes attend lectures by the different Professors, the one on the several branches of Speculative and Practical Mathematics, on Natural Philosophy, Astronomy, Chemistry and Natural History, the other on Elements of Logic, of Belles Lettres, of History and of Moral and Political Science.

"It is with greatest pleasure that the trustees inform the Public that the losses which the Institution suffered in its apparatus for Experimental Philosophy have been, in a great measure, repaired, and that they have been enabled to replace the library."

the Evidences of Divine Revelation, Moral Philosophy and Logick, is conducted by the President," but the curriculum does not appear as a well-organized whole until 1822.¹ Brown

¹ CATALOGUE OF THE OFFICERS AND STUDENTS OF NASSAU HALL. DEC., 1822.

STUDIES OF THE SENIOR CLASS.

<i>Winter Session.</i>	<i>Summer Session.</i>
Belles Lettres,	Belles Lettres,
Composition,	Composition,
Mechanics,	Mechanics,
Chemistry,	Chemistry,
Exper. Philosophy,	Exper. Philosophy,
Gr. & Lat. Class.,	Gr. & Lat. Class.,
Logic,	Astronomy,
Phil. of Human Mind,	Nat. History.
Political Economy.	
Greene's History adds:	
Nat. History, Metaphysics.	

STUDIES OF THE JUNIOR CLASS.

<i>Winter Session.</i>	<i>Summer Session.</i>
Geom., Playfair's Euclid,	Spherical Trig.,
Plane Trig.,	Elements of Astronomy,
Mensuration,	Navigation,
Gr. & Lat. Class.,	Conic Sections and Curved Line,
Composition.	Gr. & Lat. Class.,
Greene's Hist. adds:	Composition & History,
Surveying, History,	App. of Alg. to Geom.,
Locke on Human Understanding.	Fluxions, Mechanics,
	Phil. of Human Mind,
	Natural Theology.

STUDIES OF THE SOPHOMORE CLASS.

<i>Winter Session.</i>		<i>Summer Session.</i>
Arithmetic, Geography,	} Revised,	Arithmetic, Geography,
English Grammar,		English Grammar,
Mair's Introduction,		Mair's Introduction,
Cicero, Horace,		Cicero, Horace,
Collectanea Graeca Majora,		Roman Antiquities,
Homer,		Collectanea Graeca Majora,
Jamieson's Rhetoric,		Homer,
Composition,		Composition,
Algebra.		Algebra, Euclid.
In Greene's History: History given, Cicero omitted, Horace omitted, Rhetoric omitted, Euclid omitted.		

(Continued.)

STUDIES OF THE FRESHMAN CLASS.

<i>Winter Session.</i>		<i>Summer Session.</i>
Arithmetic,	} Revised,	Arithmetic,
Geography,		Geography,
English Grammar,		English Grammar,
Mair's Introduction to making of Latin,		Mair's Introduction,
Ovid, Livy,		Horace, Livy,
Xenophon,		Xenophon,
Dalzel's Collectanea Graeca,		Dalzel's Collectanea Graeca,
Algebra,		Algebra,
Composition.		Composition.

In Greene's History: Livy and Algebra are omitted. Date, 1822.

In 1824 Natural History is in the Senior list, Winter Session and Summer Session.

The Juniors have Surveying (and Mensuration) and History added to their Winter list.

Sophomores and Freshmen unchanged.

The Catalogue for 1830 says:

Candidates for admission to the Freshman Class are examined upon Caesar's Commentaries, Sallust, Virgil, the Orations of Cicero contained in the volume in Usum Delphini, the Gospels in the Greek Testament, Murphy's Lucian or Dalzel's Collectanea Graeca Minora and the first three books of Xenophon's Cyropaedia and on Mair's or Clarke's Introduction to the making of Latin, and on English Grammar, Arithmetic and Geography.

The studies of the several classes are as follows:

The Freshman list of studies is correspondingly shortened, and we have Bonycastle's Algebra specified and French introduced with the statement: "There is no extra charge for instruction in the French language."

Cicero de Amicitia appears in the Summer Session. Livy is omitted. Xenophon is, of course, omitted as belonging to the preparatory stage.

Latin composition seems to be rampant, for it extends into the Sophomore year. The clumsy farce of reviews is wholly given up (previous to this time the Freshman and Sophomore years appear to have been given over to reviews of school topics, the Senior year to reviews of college matter).

Horace,	Latin Classics,
English Translations to Latin,	French,
Graeca Majora,	Homer's Iliad,
French,	Geometry,
Geometry, Playfair's Euclid (previously in Junior year).	Elements of Astronomy,
	Plane Trigonometry.

JUNIOR CLASS, 1830.

<i>Winter Session.</i>	<i>Summer Session.</i>
Mensuration,	Spherical Trig. & Projections & ap-
Surveying,	plication of Spheres to Ast.,

University waits until 1827 before publishing another account of its course of study.²

Conic Sections,
Fluxions,
Gr. & Lat. Class.,
Philosophy of the Mind,
Natural History.

Navigation, Mechanics,
Moral Philosophy,
Greek and Latin Class.,
Natural Theology,
Evidences of Christianity,
Natural History.

IN THE SENIOR CLASS.

Mineralogy, Geology and Botany are added. Composition is omitted.

The expenses at this time are:

\$96.50 for Winter Session, \$77.50 for Summer Session, including \$2.50 damages and shoe blacking for each. \$.33 is paid by the new students for a copy of the laws.

² BROWN UNIVERSITY, 1827, LAWS.

1. Every person admitted into this University must be able to construe and parse Cicero's Orations, Virgil's Aeneid and the Greek Testament, and to write good Latin. He must know the rules of Arithmetic, and have a good moral character.

CH. II.

2. The Freshman Class, after revising a part of Virgil, Cicero and the Greek Testament, shall study Graeca Minora, Xenophon's Cyropaedia, Sallust, Cicero de Amicitia and de Senectute, Horace, Roman Antiquities, Sheridan's Lectures, Arithmetic and English Grammar. The Sophomore Class shall study Morse's Universal Geography, Blair's Lectures, Cicero de Oratore, Homer, Algebra, Euclid, Kames' Criticism and Hedge's Logic.

The Junior Class shall study Paley's Moral Philosophy and Natural Theology, Enfield's Natural Philosophy, Campbell's Philosophy of Rhetoric, Steward's Philosophy of Mind, Chemistry, Trigonometry, Surveying and Navigation.

The Senior Class shall study Butler's Analogy, Burlamaqui on the Law of Nature, The Federalist, Paley's Evidences and Vattel. They shall also revise their preceding studies. Weekly declamations will be attended by all the classes. The Senior, Junior and Sophomore Classes will have weekly exercises in English composition, and the Freshman will have a weekly exercise in making Latin.

3. There shall be three recitations of the Freshman and Sophomore Classes every day during the term, except that on days for speaking the afternoon recitation may be omitted. On every Saturday, at eleven o'clock a. m., the instructors shall examine the several classes in the studies of the foregoing week, and on Saturday afternoon there shall be no recitation. The Junior Class shall recite three times each day, excepting as above, until the spring vacation, and after that time twice each day. The Senior Class shall recite twice each day until the first of April, and from that time once each day until the second Wednesday in July.

4. The times for recitation shall be as follows: The first immediately

By this time we note a marked difference between the two institutions. The classics have greater prominence in Princeton. Brown has very nearly adopted the Pennsylvania program, evidently modeling its course on the curriculum of its neighbors in Cambridge and New Haven, where the increase in the number of general students and the corresponding decline in the enrolment of prospective candidates for the ministry practically forces upon the authorities a new educational ideal.

The growth of these institutions, Harvard and Yale, in wealth and resources now lifts them to distinguished prominence among our educational establishments and makes their adoption of any course of study significant. Whether their imitation of Pennsylvania is conscious or unconscious, we find that of 1825 both of these New England Colleges are following a curriculum very similar to the one introduced in Philadelphia in 1756.

As we have seen, the direct borrowing of this course of study by William and Mary in 1779 cannot be substantiated. But we know that wide publicity of the work of Dr. Smith was given at four different times. Its author cordially invited criticism of it by publishing it in the *Pennsylvania Gazette*, August 12, 1756, and "in the *American Magazine* of which he was the editor, in October, 1758. The year following he included it in the *Appendix* to his '*Discourses on Several Public Occasions during the war in America.*'"¹ His works published in Philadelphia in 1803 also contained it. The tried usefulness of the scheme was evident and the success of Columbia along similar lines was well known. Foreign examples were wanting and all English ideas on any topic

after morning prayers; the second at 11 o'clock a. m.; the third one hour before evening prayers.

10. Two of the students shall speak pieces on the stage every evening, after prayers (except on Wednesday, Saturday and Sunday), beginning with the alphabet in the Senior Class and proceeding through the Junior and Sophomore Classes.

¹ Montgomery, *History U. of P.*, p. 242.

were, at this period of our history, scorned. The necessity of broadening the curriculum compelled the authorities of Harvard and Yale to consider the proportionate value of the various subjects and a well articulated American device, that claimed to further the intellectual development of the students and gave to each and to all departments of study something like a suitable share of attention, must have attracted notice, comment and discussion. The knowledge of what had been done elsewhere would affect their solution of the educational problems presented from time to time and cause gradually a change in the arrangement of their programs of study such as we find has taken place in 1825.

The departments of study are now clearly marked out into Ancient Languages, Mathematics, Science and Philosophy. Trifling provision is made for Modern Languages, English and History, while reverence is paid to the former prestige of divinity by a course in Grotius de Veritate Religionis Christianae and the nominal inclusion of Hebrew among the Junior studies. The whole scheme is governed by text books, and at Brown, at least, progress appears to be reckoned by the number of pages covered in a given time.¹

¹ REPORT OF THE GOVERNMENT TO THE CORPORATION, SEPT. I, 1827.

To the Fellows and Trustees of Brown University the Government beg leave to submit the following annual report:

During the Spring term the Freshman Class pursued the study of Horace, Xenophon and Algebra, attending three recitations in each day, Saturday and Sunday excepted. In this time they advanced in Horace as far as the fourth ode of the third book, in Xenophon's *Cyropaedia* as far as the 73d page of the *Graeca Majora*, and in Algebra through the 20th article of Colburn's work on that Science.

The Sophomore Class pursued the study of Greek, Algebra and Geometry, attending daily the same number of recitations. During this period the class read the quarter part of the extracts from the *Odyssey* in the *Graeca Majora*, Colburn's Algebra one division to the 20th, and another to the 24th article, and completed the first two books of Euclid's *Elements of Geometry*.

In the same term the Junior Class pursued the study of Natural Philosophy and the Evidences of Christianity. In the first of these departments they advanced through the first part of Book 3d of *Enfield*, embracing the general properties of matter, Mechanics, and Hydrostatics. They also completed *Paley's Evidences*. The daily number of their reci-

From the flexible and comprehensive ideas of 1756 we now pass to the consideration of a curriculum restricted in its limits, narrow in its range, strict in its demands, machine-like in its execution, inhospitable in its attitude towards subjects heretofore omitted. Dr. Smith was noticeably broad and catholic in his sympathies. His successors and imitators in

tations was the same as the foregoing. The afternoons in each week were devoted to speaking and composition.

The Senior Class during the above term recited twice a day, and pursued the study of Vattel's Law of Nations and the Elements of Criticism. They completed the quarter part of the work of Vattel and the whole of the 2d vol. of Ramus' Elements. Two afternoons in each week were devoted also by this class to declamation and composition.

The third term commenced June 1st and ended September 1st, comprising fourteen weeks. In this time the Freshman Class completed the study of Horace, some portions being omitted. They also read in Greek the remainder of the extracts from Xenophon, those from Aelian and Polyaeans and a part of a Memorabilia of Socrates, and finished Colburn's Algebra.

The Sophomore Class have also finished Colburn's Algebra and one division of them nearly the whole of Lacroix. They have completed Hodge's Logic, two afternoons in each week being devoted to composition and declamation, and also Playfair's Euclid, Books 3d, 4th, 5th and 6th, omitting a part of the two last books.

The Junior Class have studied Brande's Chemistry, Enfield's Philosophy, completing Pneumatics, Magnetism, Electricity and Optics, and the four volumes of Kames' Elements of Criticism, devoting two afternoons in each week to declamation and composition.

The report also has an allusion to the equipment of a Gymnasium that is among the earliest references to the value of physical culture.

"Within the past term a Gymnasium amply provided with apparatus has been erected on the college grounds, and a competent instructor has been engaged in superintending this establishment and in teaching the students a system of safe and invigorating bodily exercise. The importance of having within the college premises facilities for the acquisition of physical education is conclusively evinced by the result of the present experiment. More of the students have availed themselves of the opportunity provided for exercise in the Gymnasium, and to this cause several of them have ascribed their increased bodily vigor and an aptitude for study quite unusual during the oppressive and long-continued heat of the summer. No serious accident has occurred—uncommon health has prevailed. In another respect the Gymnasium has been found highly beneficial. By affording the means of pure and attractive social recreations, the students have sought and found their pleasure *at home*, and the high and careless spirits of youth have been regaled with no risk of moral contamination.

the various institutions, while adopting his program, failed to recognize its tentative character and endowed his approved list with a canonical permanence that its author neglected to confer. Dr. Smith evidently took pride in his achievement, but he, probably, would have been the last person to demand that

and without a single explosion of unbecoming mirth." (Pres. Wayland's Report, 1827.)

HARVARD UNIVERSITY CATALOGUE, 1825.

COURSE OF INSTRUCTION.

First Term.

<i>Freshmen.</i>	<i>Sophomores.</i>	<i>Juniors.</i>	<i>Seniors.</i>
1. Collectanea Graeca Majora (4th Cambridge ed.)	1. Continued. 8, 9. Finished.	17. Logick (Dr. Hedge's).	26. Intellect'l Phil. (Stewart & Brown).
2. Livy, 5 books.	11. Geom. of Planes and	18. Moral Phil. (Paley's).	27. Opticks (Camb. course of Nat. Phil.)
3. Grotius de Veritate Religionis Christianae.	Solids (Legendre's).	19. Hebrew or a substitute.	28. Astronomy (Gummere's).
4. Plane Geom. (Legendre's).	12. History (Tytler's).	20. Chemistry.	
5. Adams's Roman Antiquities.			

Second Term.

1, 5. Continued.	1, 12. Continued.	21. Tacitus or an equiv. in Latin.	26. Continued or a substitute.
2, 3, 4. Finished.	13. Cicero de Oratore, or an equiv. in Latin.	22. Homer's Iliad (Robinson's), or other Greek.	27. Continued.
6. Horace (Camb. Ed.)	14. Analytick Geom. including Trig. & Conic Sections (Camb. course of Math.)	23. Differential Calculus (Camb. course Math.) or a substitute.	29. Paley's Evidences.
7. Algebra (Lacroix's).	15. Blair's Lectures on Rhet., 2 vols.	24. Mechanicks. (Camb. course of Nat. Phil.)	30. Butler's Analogy.
			31. Political Economy (J. B. Say's).
			32. Chemistry, Mineralogy, & Geol., or a substitute.
Math., or Anc. Lang., or Mod. Lang.	Mod. Lang.	Mod. Lang.	Smellie's Phil. Nat. Hist.

entrance to the curriculum be ever denied "subjects taught

Third Term.

1, 5. Continued.	1, 12, 13. Con.	24. Finished.	31, 32. Contin-
6, 7. Finished.	16. Topography	25. Electricity	ued.
8. Greek Test.	(Camb. course	and Magnet-	33. Phil. of Nat.
(Griesbach's).	of Math.)	ism (Camb.	History
9. Excerpta Lat-		course of Nat.	(Smellie's).
ina (Well's		Phil.)	(Composition
edition).			and Speaking
10. Lowth's			throughout
Eng. Gram-			the course).
mar.			

LECTURES.

Term I.

By the Professor of Divinity, Thursday to Saturday, at XI, to Seniors.

By the Professor of Hebrew, Monday to Saturday, first six weeks, at XI, to Juniors.

By the Professor of Astronomy, Monday to Wednesday, at XI, to Seniors.

By the Professor of Chemistry, Monday to Saturday, last five weeks, at XI, to Juniors.

By the Professor of French and Spanish Literature, at the times assigned to Mod. Lang.

Term II.

By the Professor of Greek, Monday to Friday, last three weeks, at XI, to Juniors.

By the Professor of French and Spanish Literature, at the times assigned to Modern Languages.

By the Professor of Chemistry, Mineralogy and Geology, one hour before evening prayers, to Seniors.

Term III.

By the Professor of Law (Royall), Monday to Thursday, at XI, to Seniors.

By the Professor of Physiology, at XI, after the lectures of the Royal Professor are finished, to Seniors.

By the Professor of Metaphysics, Monday to Thursday, at XI, to Seniors.

By the Professor of Anatomy and Surgery, first five weeks, at IV p. m., to Seniors.

By the Professor of Natural Philosophy, from Monday to Friday, except every second Friday, at XI, to Juniors.

On Saturday the Lecture may be at an earlier hour, at the discretion of the Lecturer.

The forenoon lecture or exercise for the Seniors and Juniors on Saturday, during the 2d and 3d terms, will be determined hereafter.

By the Rumford Professor, Monday, Tuesday and Wednesday, at XI, to Seniors.

with equal care and completeness and supported by the same

By the Professor of Rhetoric and Oratory, Monday, Tuesday and Wednesday, at XI, to Juniors.

By the Professor of French and Spanish Literature, at the times assigned to Modern Languages.

By the Professor of Mineralogy and Geology, Monday to Friday, at V p. m., to Seniors.

By the Professor of Natural History, Monday to Friday, last eight weeks, at IV p. m., to Seniors.

YALE COURSE OF INSTRUCTION, 1824.

The Academical Faculty, to whom is committed the government and instruction of the students, consists of a President, a Professor of Chemistry, Mineralogy and Geology, a Professor of the Hebrew, Latin and Greek Languages, a Professor of Mathematics, Natural Philosophy and Astronomy, a Professor of Divinity, a Professor of Rhetoric and Oratory, and eight Tutors.

The whole course of instruction occupies four years. In each year there are three terms or sessions.

The three younger classes are divided, each into two or three parts, and each of the divisions is committed to the particular charge of a Tutor, who, with the assistance of the Professors, instructs them. Each of the four classes attends three recitations or lectures a day, except on Wednesdays and Saturdays, when they have only two. The following scheme gives a view of the authors recited each term :

FRESHMAN CLASS.

1. Livy, two books. Adams' Roman Antiquities. Webber's Arithmetic reviewed. Day's Algebra begun.

2. Livy continued through five books. *Graeca Majora*. Xenophon's *Cyropaedia* and *Anabasis*. Day's Algebra finished.

3. *Graeca Majora*. Herodotus. Thucydides, Lysias and Isocrates. Morse's Geography. Murray's Grammar.

SOPHOMORE CLASS.

1. Horace. Odes and Satires. *Graeca Majora*. Demosthenes and Xenophon's *Memorabilia*. Playfair's Euclid, six books.

2. Euclid finished and reviewed. Horace finished and reviewed. *Graeca Majora*. Plato and Aristotle. Day's Mathematics. Plane Trigonometry. Nature and Use of Logarithms, Mensuration of Superficies and Solids, and Isoperimetry.

3. *Graeca Majora*, Vol. I finished. Cicero de Officiis, de Senectute and de Amicitia. Day's Mathematics, Mensuration of Heights and Distances. Navigation and Surveying. Dutton's Conic Sections and Spherical Geometry. Jamieson's Rhetoric.

JUNIOR CLASS.

1. Cicero de Oratore. Homer's *Iliad*, Robinson's. Dutton's Spherical Trigonometry. Enfield's Philosophy, four books.

2. Tacitus. The History. De Moribus Germanorum and Agricola.

prescriptions," equal in "weight" and "rank"¹ or that it always be rigidly adhered to even in the college for which it was originally prepared.

Just what happened to the University of Pennsylvania after the resignation of Provost Smith in 1791 is not so clear as we should like to have it. Almost the best that can be said of

Graeca Majora, Vol. 2. *Sophocles* and *Euripides*. *Enfield's Philosophy* finished and reviewed.

3. *Enfield's Astronomy*. *Tytler's History*. *Vince's Fluxions*, *Graeca Majora*, Vol. 2 continued, or Hebrew (at the option of the student).

SENIOR CLASS.

1. *Blair's Rhetoric*. *Hedge's Logic*. *Locke's Essays*.
2. *Paley's Natural Theology*. *Stewart's Philosophy of the Mind*.
3. *Paley's Moral Philosophy*. *Paley's Evidences of Christianity*.

In addition to the recitations in the books here specified, the classes receive lectures and occasional instruction from the Professor of Languages; the Junior Class attends a course of experimental lectures on Natural Philosophy, and the Senior Class the courses on Chemistry, Mineralogy, Geology and the principles of Natural Philosophy. The members of the several classes attend also the private exercises and lectures of the Professor of Rhetoric and Oratory. Specimens of English composition are exhibited daily by one or more of each of the divisions of the Sophomore and Junior Classes. Written translations from Latin authors are presented by the Freshman Class. The lower classes are also instructed in Latin composition. The Senior and Junior Classes have Forensic Disputations once or twice a week before their instructors. There are very frequent exercises in Declamation before the Tutors, before the Professor of Oratory and before the Faculty and students in the chapel.

The Berkeleian Premium, of about \$46 a year, is given to the scholar in each class who passes the best examination in Latin and Greek, provided he reside as a graduate in New Haven one, two or three years. Premiums are also given for Latin and English composition and Declamation in public.

There are two public examinations of the classes in a year, one in May, the other in September, which are continued from four to six days each. The candidates for degrees are also examined at the close of their course of study.

There are three vacations in a year; one of six weeks, beginning at Commencement, the second Wednesday in September; the second, two weeks from the second Wednesday in January; and the third, four weeks from the first Wednesday in May. No student is allowed to be absent without special leave, except in vacations.

¹ Eliot, *Educational Reform*, p. 90.

the institution is that recitation and lecture work were maintained. But resources were at a low ebb, and an examination of the records of the trustees discloses that there was an apparent lack of harmony in the conduct of affairs. "A report of a Committee of the Board of Trustees made in 1791 says that neither Geography, History, or Chronology are taught any longer in those schools,"¹ and goes on to assert that English translations annexed to the text are a detriment to students "after they have gone through Erasmus."

From the year 1795 we have the "Report of a Committee for the arrangement of the Schools" that to a certain degree modifies the program of Dr. Smith, reduces the Philosophy School to two years and introduces in addition to the schools heretofore connected together (namely the English, Mathematical, Latin and Greek, German and Philosophy) a school of Moral Science. It transposes all the classical books reserved for the Philosophical school hitherto into the Latin and Greek School, and so blends the work of this school with that of the collegiate department.

In especial this part of the report is as follows: See Document "of 1795, of the Latin School," p. 13 to p. 28.

OF THE LATIN SCHOOL.

CHAP. I.

Of the Arrangement of this School.

16. There shall not, at any one time, be more than six classes in this school.

17. The classes shall not be heard promiscuously; but each Tutor shall have certain classes assigned him, which only he shall teach, and for the progress of which he shall be accountable.

18. No Tutor shall have charge of more than two classes, unless, after assigning two classes to each Tutor, there shall be, besides, a class of beginners, in which case the beginners shall be committed to the care of the Tutor who has charge of the two lowest classes; or, if numerous, may be divided into parties and distributed among the several Tutors, as the Professor or head-master of this school shall judge most eligible.

19. Besides instructing his classes in Latin and in Greek, if they be so far advanced as to read Greek, each Tutor shall also exercise his classes in the reading and parsing of English, and in writing.

¹ Chayney, p. 208.

20. The times for reading and parsing English and for writing shall be as follows: For writing, from half after eleven in the forenoon until twelve, when the school is dismissed, and for reading and parsing English (and, if need be, for spelling off the book), from half after four in the afternoon until five, in the summer, and from four until half after four in the spring and autumn. But in the winter season, when the days are at the shortest, these last mentioned exercises (of reading, parsing and spelling) may be omitted.

21. The Professor of this school shall also have his classes, which shall always be the two highest classes belonging to this school, and which shall divide their time equally between him and the mathematical professor, in such manner as that each of them, one at a time, shall be alternately one day with the Latin and Greek and another day with the mathematical professor.

22. When the Professor of this school shall have made an end of hearing the class whose turn it shall be to attend him (for, by the preceding regulation, there can be but one of his two classes present at a time), he shall apply himself to the general business of the school, visiting his tutors, and if he perceive anything wrong or defective, either in the instruction they give or the discipline they exercise, taking occasion, at the proper time and place, to point it out to them, and to see that it be rectified.

23. The Tutors shall have precedency according to priority of appointment. And in the distribution of the classes, the junior Tutor shall have the first and second; that is, the two lowest classes, and the senior Tutor the third and fourth, unless for particular reasons it be otherwise ordered by the head-master.

24. The two upper classes of the Latin school shall continue to alternate, as above directed, until they have gone through in the Latin school the course prescribed in the next chapter; and in the mathematical school have made themselves perfectly acquainted, at least, with common arithmetic, vulgar and decimal fractions, and algebra.

25. When the Faculty are of opinion that any class is sufficiently grounded in these studies, they shall appoint a day when such class shall be examined for admission into the Philosophical schools, of which day due notice shall be given to the trustees, that if they, or any of them, should have leisure and be inclined, they may have it in their power to attend. And the class, if approved of at this examination, shall not again be examined in the same authors and on the same branches; but when examined afterwards for degrees shall be examined upon those studies only which have been subsequent to their admission into the Philosophical schools.

26. At the expiration of every quarter the Professor of this school (as was before directed to be done by the English Professor in his school) shall collect the tuition money due from his scholars; and after paying out of it what is due to his Tutors, and also one-half of the sum collected from the boys of the two highest classes, to the mathematical professor, shall consider the remainder as his salary. But in addition to this the trustees shall provide him with a dwelling house, rent free, for the accommodation of his family.

CHAP. II.

Of the books to be read by each class, and of the manner in which the studies of each class shall be conducted.

Of the First or Lowest Class.

27. In this class shall be read the Latin accidence and the rules for the gender and for the increase of nouns, followed by the vocabulary, from the beginning of the book to the end of the adjectives; the rules for the preterites and supines of verbs, followed by the vocabulary from the adjectives to the end of the book; the fundamental rules of syntax and the rules for the increase of verbs, followed by *Sententiae pueriles* and Cordery, and by the practice of putting, once a day, some verb through its several moods and tenses, showing the formation of each tense and giving the rules for the quantity of each syllable of increase.

28. In hearing a lesson in the nouns of the vocabulary, a rule shall always be required, not only for the gender of each noun, but for the quantity of the syllable or syllables increase, if it be a noun which has increase.

29. In *Sententiae pueriles* and Cordery, not the first sentence only, but the whole lesson, shall be parsed.

30. Through the whole course no book shall be laid aside upon having had but one reading. There may, indeed, be but few books which can be read quite through, because time will not permit, but whatever part of a book is read once, it shall be the practice of this school to read twice.

31. In going over Cordery the second time (and the same may be said of Esop and Erasmus) the boys shall, occasionally at least, be required to hide the Latin and to translate from the English, and shall be made to commit whole colloquies to memory, and to pronounce them in open school, with due regard to tones, emphasis and quantity, as exercises in elocution.

32. Long before boys have finished the reading of Cordery, they may be supposed to have gone several times over all parts of grammar, except the rules for the quantity of final syllables, and what follows respecting feet and the different species of verse (the knowledge of which could not be of much use to them until they come to read poetry); yet must not the practice of reciting the grammar by memory be discontinued, and the usual time of doing it, every morning immediately after the examination of the versions is as good as any. But these lessons shall be short, consisting of but two or three rules, so as to take in but ten or twelve lines, and each boy shall be made to recite the whole without missing a word, under the penalty of being made to sit down or of being otherwise disgraced, as the case may require.

33. But when a tutor perceives that, by a perseverance in this practice, all parts of grammar have become perfectly familiar to any class, he shall, at least every other day, substitute, instead of the grammar lesson, some beautiful passage, taken from any of the authors they are then reading, or have read, and consisting of not above twelve or fifteen, or at most twenty, lines.

Of the Second Class.

34. In this class shall be read, during the first half year, Esop's Fables and Erasmus' Dialogues; and during the second half year, *Selectae e veteri and Phaedrus*.

35. Upon entering into this class boys shall begin to write Latin versions or, as they are more usually termed among us, exercises.

36. When a class begins to write exercises, the Tutor shall call them up, every evening before school is dismissed, and make them parse the English which they are about to translate.

Of the Third Class.

37. The books read in this class shall be during the first six months Ovid and *Selectae e profanis*, and during the second six months Ovid and Caesar's Commentaries.

38. When boys begin Ovid they shall carefully review what they had before of Prosody, adding, what they can now no longer do without, the rules for the quantity of final syllables.

They can no longer do without the rules for the quantity of final syllables, because the practice of scanning must now commence and accompany every lesson that is said in Ovid, and afterwards in Virgil and the other poetical authors.

39. Upon entering into this class boys shall also be instructed in the general nature and use of tropes and figures, and be made to commit good definitions to memory, so as to be able to distinguish them whenever they occur. In Ovid and Virgil they occur often, and should never be suffered to occur unnoticed. And instead of a Latin, they shall now be required to bring in, two mornings in every week, an English exercise; that is, a written English translation of some passage in a Latin author.

Of the Fourth Class.

40. The books of this class shall be, for the first six months, Virgil and Sallust, and for the second, Virgil and Terence.

41. When the boys begin Virgil they shall at the same time be made to begin the Greek Grammar. But the portion of which any morning lesson in the Greek Grammar shall consist (and the same rule shall be applied when a class is learning, for the first time, the Latin Grammar) shall be given out and thoroughly explained by the Tutor the preceding evening.

Of the Fifth Class.

42. In this class shall be read, for the first nine months, Horace and the Greek Testament, and for the remaining three months, Horace and Lucian.

43. Both in this, and in the next class above it, versions or exercises shall be continued, as directed above (No. 35). But in addition to these the boys shall now be required to write themes, which shall be given in and examined every Monday morning, in place of the exercise. Morning lessons also in the Greek grammar shall continue to be said in the same way in which morning lessons in the Latin grammar were directed to be said (No. 32). And on coming into school, every day in the afternoon,

a Greek verb shall be put through the several moods and tenses, and the rules given for the formation of each tense.

Of the Sixth Class.

44. The books read in this class shall be, for the first six months, Lucian and Livy, and for the second six months, Xenophon's *Cyropedia* and Cicero's *Orations*.

Of the Mathematical School.

45. In this school the fourth or highest class of the English school shall be taught every afternoon, as directed above (No. 15), that such of the youth as are not designed by their parents or guardians for the study of the languages and of philosophy, may begin betimes to apply themselves to the study of Arithmetic, Book-keeping, Geography, and such other branches of Mathematical learning as may be thought requisite to qualify them for that particular business or calling in life to which they are destined.

46. In this school shall also attend the fifth and sixth, that is, the two highest classes of the Latin school, the first one day and the other the next, in rotation, as directed above (No. 21), that being well instructed at least in common arithmetic, vulgar and decimal fractions and algebra, they may be duly prepared for the study of physics and of the higher branches of the mathematics, which are taught in the philosophical schools, by the Professor of Natural Philosophy.

47. But although the mathematical school never appears to be so essential a part of the university as it does when considered as auxiliary to the English and Latin schools, and introductory to the philosophical, yet to entitle a person to admission into it, it shall not be necessary that he belong to any of the other schools. On the contrary, any person may be admitted into it who wishes either to go through a full course of mathematics or to make himself master of a particular branch, though he apply to no other study.

48. In this school also the utmost exertions shall be made to improve boys in writing, and to this end they shall be made to devote a part of each day to the writing of copies, and shall be obliged to make the usual entries in their cyphering books with as much neatness as possible, and to keep them fair and unblotted.

49. At the expiration of each quarter the Professor of this school, as is directed to be done by the other Professors above mentioned (No. 26), shall collect the tuition money due from those of his pupils who attend this school only; and out of it, and of the monies directed (p. 4, 26) to be paid him by the Professor of the English and by the Professor of the Latin school, shall pay what is due to his Tutors, and the remainder, with the additional sum of — pounds, paid him every quarter out of the funds of the institution, shall constitute his salary.

Of the German School.

50. To the Professor of this school shall belong the right of employing and of dismissing his Tutors, and at the expiration of each quarter he shall collect the tuition money due from his scholars, and after paying his

The first definite mention of studies and courses since the time of Dr. Smith is to be found in the Trustees' records for March 4, 1800,¹ but here the questions are those of mere detail. The Rules and Statutes of 1811, 1817 and 1820 show

Tutors (if he shall have employed any) shall consider the remainder, with the additional sum of —, as his salary.

Of the Philosophical Schools.

51. When any class is admitted into the Philosophical schools they shall apply themselves to the farther prosecution of Mathematics and classical learning, and to the study of philosophy, for the space of two years, after which, if found worthy, they shall be admitted to the degree of Bachelor of Arts.

52. The studies for the first year shall be Mathematics continued, Elements of Geography, Natural History and Chemistry, under the Professor of Natural Philosophy; and under the Professor of Moral Philosophy, Elements of Civil History and Chronology, and Pneumatology, together with the first six books of Homer's Iliad, and Juvenal's Satires (omitting such as are exceptionable). Those of the second year Mathematics continued, and Natural Philosophy and Astronomy in the Natural Philosophy department; and in the Moral Philosophy department, Ethics, Economics, Politics, Logic and Rhetoric, together with Epictetus' Enchiridion, Tully's Offices, and Longinus on the sublime.

53. Of the Philosophical students, neither the common Latin exercises nor Grammar lessons shall be required; but every alternate Saturday each student shall deliver in to the Professor whom it is on that day his turn to attend, an essay or other piece of his own composition, in English, on some subject which that Professor shall have previously given out to him, and on the Saturday following he shall again deliver the same translated into Latin.

54. At the expiration of every quarter the Vice-Provost shall collect the tuition money due from the students of the Philosophy schools, one-half of which sum, appropriated to his own use, together with the sum of — pounds, paid him every quarter out of the funds of the institution, shall constitute his salary.

55. The remaining half of the tuition money collected by the Vice-Provost shall be paid by him into the hands of the Provost, and this, together with the sum of — pounds paid him every quarter, out of the funds of the institution, shall constitute the salary of the Provost.

56. Besides attending to the duties of their own schools, the Provost and Vice-Provost shall, once in every three months, examine every other school belonging to the institution, the German school only excepted, and shall make a report thereof to the Board of Trustees at their monthly meeting next ensuing.

¹ See Vol. V of Trustees' Records, U. of P., p. 210.

that the old course is nominally the required one, though shorn of much of its power and strength.¹

¹ RULES AND STATUTES, UNIVERSITY OF PENNSYLVANIA, 1811.
OF THE COLLEGE.

1. The students of the collegiate department shall be distributed into three classes, viz.:

The senior class.

The junior class.

The freshman class.

2. These classes shall be under the immediate care and instruction of three professors (one of whom shall be the provost and another the vice-provost), viz.:

A professor of moral philosophy.

A professor of natural philosophy and mathematics.

A professor of languages.

3. The professor of moral philosophy shall instruct the students in logic, moral philosophy, metaphysics, including natural theology, and the philosophy of the human mind. He shall also instruct them in those classics which shall have been omitted in their preceding studies; and he shall superadd to the elements of rhetoric taught in the freshman class, instruction in the belles lettres and the English language generally.

4. The professor of natural philosophy and mathematics shall instruct the students in natural philosophy and the mathematicks.

5. The professor of languages shall instruct the students in the higher Greek and Latin classicks, Greek and Roman antiquities, rhetoric, ancient and modern geography, chronology and the elements of history.

6. The professors, besides what more particularly appertains to their respective professorships, shall instruct the students in such other branches of science as are necessary to complete a collegiate education, making, as nearly as may be and expediency will permit, an equal distribution thereof among themselves.

7. The course of studies of the different classes shall be:

First Year. Freshman Class.

1. Professor of Languages.

Lucian.

Virgil.

Horace.

Xenophon's *Cyropaedia*.

Homer, or such other portions of each author as the professor shall judge expedient.

Ancient and modern geography.

Elements of history.

Greek exercises and Latin themes continued.

Exercises in elocution.

The revision of 1826 designates the Professors and Tutors as |✓

Second Year. Junior Class.

2. Professor of Moral Philosophy.
 - Longinus.
 - Cicero de Oratore.
 - Dionysius.
 - Quintilian, or such portions of each author as the professor shall judge expedient.
 - Horace's Epistles to Augustus, and Art of Poetry, critically.
 - Logick.
 - Rhetorick.
 - English grammar.
 - Exercises in Latin and in English composition.
 - Declamation in English.
3. Professor of Natural Philosophy and Mathematicks.
 - Fractional Arithmetick.
 - The higher parts of common arithmetick, including the extraction of roots, etc.
 - The doctrine of logarithms, with their application to the higher branches of arithmetick.
 - Algebra.
 - Plane geometry, comprehending the first six books of Euclid's Elements, and its application.
 - Plane trigonometry and its applications.

Third Year. Senior Class.

1. Professor of Moral Philosophy.
 - Demosthenes' Orations.
 - Cicero's Orations.
 - Epicteti Encheiridion.
 - Tully's Offices.
 - Juvenal, or such portions of each author as the professor shall judge expedient.
 - Philosophy of the human mind.
 - Natural theology.
 - Moral philosophy.
 - Latin composition.
 - Declamation in Latin and English.
2. Professor of Natural Philosophy and Mathematicks.
 - Eleventh and twelfth books of Euclid's Elements, with spherick geometry and trigonometry, and the application of sphericks to astronomical problems.
 - Conick sections.
 - The doctrine of fluxions, with their applications.
 - Geography reviewed, with the use of the globes and the construction of maps.
 - Natural philosophy, including astronomy, electricity and the principles of chymistry.

the "Faculty of Arts," extends the undergraduate period to ✓

8. No student shall be admitted into the freshman class unless, on examination by the professors in the collegiate department, he shall appear to be conversant with the books prescribed for the scholars in the grammar school, or others requiring equal skill, and to be sufficiently grounded in common arithmetic and vulgar and decimal fractions; nor shall any student be admitted into either of the other classes unless, on examination, he shall give satisfactory proof of his having made such further proficiency in learning as to render him fully competent to the studies of the class into which he applies for admission.

PROJECT OF A CODE OF LAWS, UNIVERSITY OF PENNSYLVANIA, 1817.

CHAPTER VI.

Of the Studies.

The studies of the college classes shall, as nearly as can be made practicable, be as follows:

Art. 1. Studies with the Professor of Moral Philosophy.

During the First Session.—Geography and History.

During the Second Session.—Philosophy, Rhetoric, Logic.

During the Last Session.—Philosophy of the Human Mind, Natural Theology, Moral Philosophy.

During the Whole Course.—Exercises in English Composition, and Declamation, and Recitations in Latin and Greek Classics.

Art. 2. Studies with the Professor of Mathematics and Natural Philosophy.

During the First Session.—First term: Arithmetic, Algebra.

Second term: Algebra and Geometry alternately, application of Algebra to Geometry.

During the Second Session.—First term: Arithmetic of Sines, Plane Trigonometry, Polygonometry (Surveying), Spherical Trigonometry, Analytic Geometry, including curves of the second degree (the conic sections).

Second term: Analytic Geometry of three dimensions, including the analysis of curved surfaces, Algebraic Functions, Differential Calculus (Fluxions).

During the Last Session.—First term: Integral Calculus, Calculus of Variations, Mathematical Principles of Natural Philosophy, Course of Lectures on Chemistry.

Second term: Astronomy, Course of Lectures on Natural Philosophy.

Art. 3. Studies with the Professor of Languages.

During the First Session.—In Latin: Horace and Cicero's Orations.

In Greek: Lucian and Xenophon and Hesiod, with a Latin translation.

During the Second Session.—In Latin: Juvenal and Perseus.

In Greek: Homer and Epictetus.

During the Last Session.—In Latin: Tully's *Officis* and Quintilian.

In Greek: Longinus, Demosthenes' Orations.

four years and reinstates the ancient curriculum in much of ✓

During the Whole Course.—Daily: Latin and Greek Grammar Lessons and Exercises in Latin and Greek Composition.

RULES AND STATUTES, UNIVERSITY OF PENNSYLVANIA, 1820.

5. The requisites for entering the Sophomore, or third class, in this University shall be as follows:

Every such applicant shall have read Virgil, Sallust and Horace in the Latin, the New Testament, Lucian's Dialogues, Xenophon's Cyrus and the *Graeca Minora* of Dalzel, in the Greek language, and learned quantity and scanning in each. He shall also have been taught arithmetic of whole and broken numbers and the extraction of roots, English grammar, the elements of geography and Greek and Roman antiquities. His fitness must appear on examination. He shall be also of, at least, fourteen years. Any special exception to this last provision shall be decided by the Board upon application of the Professors.

6. The course of instruction shall be as in the following tables:

THE SOPHOMORE, OR THIRD CLASS.

	<i>Professor of Languages.</i>	<i>Vice-Provost Professor of Mathematics.</i>	<i>Provost.</i>
<i>Studies.</i>	Greek. Latin.	Algebra. Euclid. Practical Geometry.	Elocution, History and Chronology. Geography Re- viewed.
<i>Text Books.</i>	Epictetus, Hom- er's Iliad. Cicero de Officiis. De Oratore. Orations.	Bonnycastle or Euler. Playfair. The Compend, or Gummere.	Blair's Lectures. Tytler, Le Sage's Historical Atlas, O'Neal.

JUNIOR, OR SECOND CLASS.

	<i>Professor of Languages.</i>	<i>Vice-Provost Professor of Mathematics.</i>	<i>Provost.</i>
<i>Studies.</i>	Greek. Latin.	Plane Trigonometry. Mensuration. Navigation. Spherics. Inferior Astronomy. Maps. Dialing.	Logic. Science of the Mind. Composition. Natural History.

its former glory, but, as elsewhere, it is here deprived of its excellence of flexibility and of its liberty for private study.¹

	Collectanea Graeca Majora, Vol. I.	Compend.	Duncan, or Watts or Hedge.
	Juvenal	Robertson's Naviga- tion.	Locke's Essays.
<i>Text</i>	Lucian's		
<i>Books.</i>	Pharsalia.		Paley.
	Horace's Epistles & Art of Poetry, reviewed.		

SENIOR, OR FIRST CLASS.

	<i>Professor of Languages.</i>	<i>Vice-Provost Professor of Mathematics.</i>	<i>Provost.</i>
	Greek.	Conic Sections.	General Grammar.
	Latin.	Fluxions.	Moral Philosophy.
<i>Studies.</i>		Natural Philosophy.	Natural and Polit- ical Law.
		Chemistry.	
		Astronomy, Superior.	

	Collectanea Graeca Major, Vol. II.	Compend.	Hutchinson,
	Tacitus.	Cavallo.	Paley, Smith or Witherspoon.
<i>Text</i>		Henry's Chemistry.	
<i>Books.</i>		Laplace's System of the World.	

¹ LAWS OF THE UNIVERSITY OF PENNSYLVANIA, 1826.

COURSE OF INSTRUCTION.²

² Source—"Charters, Statutes and By-Laws of the University of Pennsylvania, Revised March, 1826."

Freshmen.

With Tutor. Latin; Cicero's Orations; Horace (Odes and Satires); Grammar; Themes; Arithmetic reviewed; Roman and Grecian Antiquities.
Prof. Lang. Greek; Epictetus; Graeca Majora, Vol. I; Greek exercises.
Prof. Math. Algebra (to quadratic equations inclusive); Geometry (the theorems of Euclid).

Sophomores.

Tutor. History, Ancient and Modern.
Prof. Lang. Latin; Cicero (de Officiis et de Oratore); Terence, Horace (Epistles and Art of Poetry); Greek; Graeca Majora, Vol. I completed; Homer's Iliad reviewed; Latin and Greek exercises.
Prof. Math. Elements of Algebra and Geometry completed; Problems of Geometry (practically); Application of Algebra to Geometry; Plane Trigonometry (the demonstrations analytically); Surveying and Mensuration; Spherical Geometry and Trigonometry.

Thus we have seen what began as a temporary expedient in one college is at length fashioned into a permanent vehicle for all. Its defects are exalted into merits. Its omissions are decreed to be everlasting. What was originally included may be increased in quantity but must never be abridged. A scheme that was intended to assist the student's development has become a machine to enforce on him wholesome discipline. The friendly relationship that formerly existed between tutor and pupil is no longer in evidence. Tutors are engaged to assist in the police regulations.¹ It is "The Academic Faculty to whom is committed the government and instruction of the students."²

This general limitation of the curriculum to a series of prescribed subjects variously taken from the Classics, Mathematics, Science, History and Philosophy marks a great step toward uniformity in the course of study in the college in the United States. In 1842, Francis Wayland asserts that the studies "in all the Northern Colleges are so nearly similar that students, in good standing in one institution, find little difficulty in being admitted to any other."³ The catalogues

Prof. Nat. Phil., etc. Perspective Geography, including use of Globes and construction of Maps and Charts.

Prof. Mor. Phil., etc. Rhetoric and Criticism; English Composition.

Juniors.

With Prof. Lang. Latin; Juvenal and Perseus; Greek; Graeca Majora, Vol. II.

Prof. Math. Higher Algebra; Analytical Geometry (including conic sections); Differential Calculus (Fluxions).

Prof. Nat. Phil., etc. Natural Philosophy and Chemistry.

Prof. Moral Phil., etc. Logic; Grammar; Moral Philosophy; Natural Theology; Composition; Forensic Discussions.

Seniors.

Prof. Lang. Longinus; Former authors reviewed or completed.

Prof. Math. Integral Calculus; Mathematical course reviewed.

Prof. Nat. Phil. Mathematical Principles of Natural Philosophy; Courses of Natural Philosophy and Chemistry, second time.

Prof. Moral Phil., etc. Natural and Political Law; Metaphysics; Composition and Forensics.

¹ Am. J. of Science, p. 307.

² Yale Catalogue, 1824.

³ Wayland, "On the Present College System," Boston, 1842, p. 35.

reveal that by 1825 this general system is well established. Modern languages are wanting, or are introduced in an apologetic manner, as if the integrity of the scheme would be forfeited by giving formal attention to them. Yet we have seen that Dr. Smith in his *General Idea of the College of Mirania* realized their importance and he probably omitted them from his plan for the Philadelphia Academy largely because the course there was limited to three years. In 1756, in Philadelphia, an English education was of greater necessity than was acquaintance with the romance tongues. German was the native speech of many of its citizens. The collateral reading he recommended provided sufficient occupation for the students' leisure, and if sedulously pursued, ensured the breadth of culture that was the aim and purpose in the Provost's mind.

Now all this is changed. The college curriculum is a drill, not a means of culture. Minds are to be formed by the one pattern and characters fashioned by one uniform mould. The beauty and the completeness of the system is its own apology. Its effectiveness cannot be improved. Its defenders are eloquent; its endorsement emphatic. Criticism is vigorously resisted. The plan of study as already arranged is perfect. "It is a definite curriculum, designed as a mental discipline."¹ "The obligatory studies are such as are universally regarded as furnishing the best discipline for the mind, and such as are indispensable to a man of liberal education."²

This report of the Faculty of the University of Alabama in 1854, from which these quotations are made, is one of the results of a pamphlet that was published in 1828 in New Haven. In this earlier document was forever marked out the line of defense against all assaults on the established system. The reverent regard paid to this formulation of collegiate ideals by twenty-five years of reference in the Yale Catalogue gives it the sanctity of a charter, a constitution or a bill of rights in our collegiate history. The "Original

¹ Memoir of F. A. P. Barnard, p. 189.

² *Ibid.*, p. 190.

Papers in Relation to a Liberal Course of Education" as embodied in the report of a Committee appointed "at a meeting of the President and Fellows of Yale College, September 11, 1827," and published in the XV Volume of the American Journal of Science, is the third great contribution that the colleges of the United States have made to literature dealing with the history of their curriculum.

We have thus far traced the effect of two such contributions, namely, the Statutes of Henry Dunster, 1642, and the program of William Smith, 1756. The one developed our colonial curriculum, the other provided the course of study for the post-revolutionary college. We have seen how from slender beginnings the institutions grew powerful and, to some extent, prosperous, and how their importance in the educational economy of the country is gradually more and more acknowledged. Suggestions of their possible service to the commonwealth are now in active debate. One result of such discussion closed the Colonial Period when the College of William and Mary adopted the reforms of Thomas Jefferson. A second controversy provided this report of the Yale Faculty which emphatically influenced the course of study and profoundly affected the trend of educational thought. It placed the college program once for all *on the basis of discipline*, which President Day formulated as follows:

"The two great points to be gained in intellectual culture are discipline and the furniture of the mind. The former of these is, perhaps, the most important of the two."¹ And Professor Kinsley added the word *thoroughness* to our educational vocabulary, while Governor Tomlinson asserted that the "Knowledge of the classics is useful, decidedly and positively useful in the intellectual discipline of youth."²

It emphatically *prescribed* the branches of study that should be taught, "which ought to be understood by every one who aims at a thorough education," and *declares* that (p. 312) *its list*, (the old one of William Smith, by the by,) is *all inclusive*.

¹ Report of Y. F.

² P. 343.

"What subject which is now studied here, could be set aside, without evidently marring the system, not to speak particularly in this place of the ancient languages? Who that aims at a well-proportioned and superior education will remain ignorant of the elements of the various branches of the mathematics, or of history and antiquities, or of rhetoric and oratory, or natural philosophy, or astronomy, or chemistry, or mineralogy, or geology, or political economy, or mental and moral philosophy?"¹

The report, of course, denies that the college is not progressive, but the positions taken on the various questions involved in the discussion and the conclusions reached seem to permit of the inference that, in the minds of the faculty and the committee of the corporation, the fulness of time had at length granted them the great opportunity of determining what was and was to be the best college course possible for American youth. Any change from the existing order was to be resisted as one would resist a dire calamity to students, college and the commonwealth. For the safety of all the present excellent, adequate and comprehensive system of collegiate education must and should be preserved.

In the language of Governor Tomlinson: "The country demands this classical culture, to imbue the young with principles of patriotism, liberty to excite to generous action by impressing on them the character of the ancients."

To reduce it would be to check the diffusion of intelligence among our people; "the general standard of intellectual and moral worth lowered, and our civil and religious liberty jeopardized by ultimately disqualifying our citizens for the exercise of the right and privilege of self-government."²

As these ideas were fulminated in an important institution they not only influenced contemporary establishments but were so long quoted, as we have said, in the successive catalogues of Yale itself that the undergraduate body there became thoroughly imbued with their principles and aims. As

¹ P. 313.

² P. 346.

Yale graduates went into the middle West and to the South to take in charge younger educational enterprises they carried with them these notions of discipline, thoroughness and the completeness of the program of study they had themselves pursued. F. A. P. Barnard, though a graduate of an earlier day, was of the Governing Board of Yale when the Report was issued. His educational ideas were strongly biased by this publication as the history of his career in Alabama in the Memoir of his Life shows. The curriculum of the College of the Western Reserve in Cleveland, Ohio, was avowedly arranged to make the institution "The Yale of the West." These are but typical instances of the wideness of the circle of influence of this Report.

The report was based first, on a firm belief in the value of the classics as the most important studies for the student to pursue. Secondly, the college course was to be uniform for all students, lest the meritorious system should fail of efficiency.

The idea that the college course in the United States was a system seems to date from the time of the appearance of this publication. A new definition of the curriculum is henceforth provided, to remain paramount during the remaining forty years of this period of transition we are now considering, and to assert its power and strength long after other ideals had demonstrated their right for consideration.¹

¹ SUMMARY OF REPORT OF YALE FACULTY, 1827.

The president in one of his opening paragraphs undertakes to define the aim of a college course, namely, "to lay the foundation of a superior education," at a period of life when a substitute must be provided for parental superintendence. "The two great points to be gained in intellectual culture," says President Day, "are the discipline and the furniture of the mind. The former of these is, perhaps, the most important of the two." The faculties of the student are to be called into daily and vigorous exercise. "Those branches of study should be prescribed, and those modes of instruction adopted, which are best calculated to teach the art of fixing the attention, directing the train of thought, analyzing the subject proposed for investigation; following with accurate discrimination the course of argument, balancing nicely the evidence presented to the judgment; awakening, elevating and controlling the imagination; arranging with skill the treasures which memory gathers; rousing and guiding the powers of genius."

"In laying the foundation of a thorough education, it is necessary that all the important mental faculties be brought into exercise." "In the course of instruction in this college, it has been an object to maintain such a proportion between the different branches of literature and science as to form in the student a proper balance of character."

"No one feature in a system of intellectual education is of greater moment than such an arrangement of duties and motives as will most effectually throw the student upon the resources of his own mind." "The inventive powers are especially to be called into vigorous exercise. But these are not the only objects of a liberal education. To the discipline of the mind is to be added instruction."

"Such branches are to be taught as will produce a proper symmetry and balance of character."

"Students are generally of an age which requires that a substitute be provided for paternal superintendence."

The family relation or aspect of affairs is to be maintained.

There is to be a due proportion between lectures and recitations. Lectures do not bring responsibility home to the student. "To secure his earnest and steady efforts is the great object of the daily examinations or recitations. In these exercises a text book is usually the guide."

To obviate the drawback that this method involves and to prevent the narrowness consequent upon it, "opportunity is given in all our classes for a full investigation and discussion of particular subjects, in the written and extemporaneous disputes," not, however, to the extent that "it impedes the necessity of effort on the part of the learner. It is to secure the unceasing and strenuous exercise of the intellectual powers," that "our semi-annual examinations have been established. But to the instructors the daily examinations in the recitation rooms are a more unerring test of scholarship than the public tests." P. 306.

"We deem it to be indispensable to a proper adjustment of our collegiate system that there should be in it both Professors and Tutors. There is wanted on the one hand, the experience of those who have been long resident at the institution, and on the other, the fresh and minute information of those who, having more recently mingled with the students, have a distinct recollection of the peculiar feelings, prejudices and habits of thinking. At the head of each great division of science it is necessary that there should be a professor, to superintend the department, to arrange the plan of instruction, to regulate the mode of conducting it and to teach the more important and difficult parts of it. But students in a college who have just entered on the first elements of science, are not principally occupied with the more abstruse and disputable points. Their attention ought not to be solely or mainly directed to the latest discoveries. They have first to learn the principles which have been in a course of investigation through successive ages, and have now become simplified and settled. Before arriving at the regions hitherto unexplored, they must pass over the intervening cultivated ground. The professor at the head of a department may, therefore, be greatly aided, in some parts of the course of instruction, by those who are not as

pensable. Is the college to be open to all? Shall every college become a high school, gymnasium, lyceum or academy?

We have no funds for a parallel course, and if we had, we must never surrender our present undergraduate department.

By opening the college to the general public we would lower our standard and would lose prestige and students.

Badly prepared students are now one of our chief difficulties.

Another is the students' notion that some difficult studies have no practical utility.

We do not speak for other colleges; only for ourselves.

We have abundant supply of this Lombardy poplar growth, slender, frail and blighted. We should like to see more of the stately elm; striking deep its roots, lifting its head slowly to the skies, spreading wide its grateful shade and growing more venerable with years.

Superficial education is a waste of time and money. Patriotism urges us to provide thorough education. We must set the standards for the lower schools. Our form of government demands diffusion of the best education. We must impart "that various and general knowledge which will improve and elevate and adorn any occupation."

"Where a free government gives full liberty to the human intellect to expand and operate, education should be proportionately liberal and ample."

PART II.

PROFESSOR KINGSLEY.

"An education to be liberal should have reference to the various branches of knowledge, and as knowledge varies education should vary with it."

The sciences and mathematics are valued for enlarging the thought and giving superior information and so providing new means for benefiting or influencing others and the mind is liberalized by liberal knowledge. Classical literature is based on the same general argument. Its study is universal.

If scholars are to be prepared to act in the literary world as it in fact exists, classical literature, from considerations purely practical, should form an important part of their early discipline.

It has distinct and independent merits. Familiarity with the Greek and Roman writers is especially adapted to form the taste, to discipline the mind, both in thought and diction, to the relish of what is elevated, chaste and simple. The compositions which these writers have left us, both in prose and verse, whether considered in regard to structure, style, modes of illustration or general execution, approach nearer than any others to what the human mind, when thoroughly informed and disciplined, of course approves and constitute what is most desirable to possess, a standard for determining literary merit.

Sculpture and architecture and other departments of taste exhibit the same excellence in classic fields. In poetry and eloquence they are unsurpassed. The study itself forms the most effectual discipline of the

as we think, by every one who aims at a thorough education. The principles of science are the common foundation of all high intellectual attainments."

"What subject which is now studied here could be set aside without evidently marring the system? Not to speak particularly in this place of the ancient languages, who that aims at a well proportioned and superior education will remain ignorant of the elements of the various branches (P. 313) of the mathematics, or of history and antiquities, or of rhetoric and oratory, or natural philosophy, or astronomy, or chemistry, or mineralogy, or geology, or political economy, or mental and moral philosophy?"

President Day denies that the average student lacks capacity to comprehend any or all of these and anticipates President Eliot when he states:

When a class have become familiar with the common elements of the several sciences, then is the proper time for them to divide off to their favorite studies. They can then make their choice from actual trial. This is now done here to some extent in our Junior year. The division might be commenced at an earlier period and extended farther, provided the qualifications for admission into the college were brought to a higher standard.

We do not give a partial education, a superficial education, or a finished education, but commence a thorough course and carry it as far as the residence will allow. It is not a professional or a trade school. Nor is it an academy. It is not a European University. Here there is no monopoly of the higher education as in England, nor have we the resources and the qualified students of Germany.

"It would, in our opinion, be idle to think of adopting in the college the regulations and plan of instruction in a university, unless the students of the former were advanced three or four years farther than at present, both in age and acquirements.

"When the student has passed beyond the ragged and cheerless region of elementary learning into the open and enchanting field where the great masters of science are moving onward with enthusiastic emulation, when instead of plodding over a page of Latin and Greek, with his grammars and dictionaries and commentaries, he reads those languages with facility and delight, when, after taking a general survey of the extensive and diversified territories of literature, he has selected those spots for cultivation which are best adapted to his talents and taste, he may then be safely left to pursue his course without the impulse of authoritative injunctions or the regulation of statutes and penalties. But we question whether a college of undergraduates, unprovided with any substitute for parental control, would long be patronized in this country." P. 316.

We cannot hope to imitate foreign Universities without raising the standards of admission. These are now under way and will probably reduce the age of admission.

Yet when a youth is advanced in age the thorough course is indis-

expect and nothing to fear, but by deserting the highroad which it has so long traveled and wandering in lanes and bypaths, it would trifle with its prosperity and put at hazard the very means of its support and existence. P. 337.

The college is not a place of abuses and is not opposed to improvement.

It is called European and mediæval and is said to be just what it was when founded. But see Chandler's "Life of Dr. Johnson."

"Surely it will not be maintained by any one, who has the least knowledge of the subject and who has no sinister object in view, that from 1714-1828 only slight alterations have been made in the system of education in this college. Within the last thirty years other changes have been introduced. All such are in the hands of the faculty. The college is not stationary. Examinations are not a farce but a powerful incentive to study. The faculty tries to do its teaching duty as well as it understands it. We believe that in every department our students are taught with that thoroughness which enables them, with proper exertions—a condition so far as we know presupposed in every country—to go safely and directly onward to distinction in the department they have entered without returning to lay anew the foundation of their success." P. 343.

REPORT OF THE COMMITTEE OF THE CORPORATION.

BY GOVERNOR TOMLINSON.

He first refers to the co-operation of the faculty in preparing the report. They are all experts from their "long experience and careful observation in the business of instruction." P. 334.

The committee are much gratified that the faculty "have taken a comprehensive view of the whole course of instruction and developed the elements of a liberal education and the principles by which it should be regulated and administered, exhibiting forcibly the intimate connection which classical literature has with other learning and the sciences and the facilities afforded by its preliminary study in their attainment." P. 334.

The committee briefly detail their opposition to any change.

1. In the Universities of Europe a knowledge of the ancient languages seems to be deemed a prerequisite to the learned professions. Ignorance of them is an obstacle to success.

2. The learned world settled this matter long ago. The estimation in which classical attainment is held determines the intelligence of a community. France a melancholy example to the contrary. Her literary fame is eclipsed; 1829. Germany has left her far behind.

3. The reputation of the institution will suffer by the proposed course and we would aid in depressing the literary character of the country.

4. The country demands classical culture to imbue the young with principles of patriotism, liberty, to excite to generous action by impressing on them the character of the ancients. To do this thoroughly we must teach the ancient language. We must urge this study here so long as it is followed abroad. To reduce it would be to check the diffusion of intelligence among our people: "The general standard of intellectual

mental faculties. "It is unnecessary here to cite authorities. It must be obvious.

"Every faculty of the mind is employed; not only the memory, judgment and reasoning powers, but the taste and fancy are occupied and improved."

It is the best preparation for professional study. Its "want" has been "lamented."

History, Theology, Medicine all require it. The substitute, the *Henriade* of Voltaire, and the History of Charles XII., are inadequate from the standpoint of taste or to understand the true spirit and genius of English literature. "The most superficial acquaintance with the principal authors in our language is sufficient to excite wonder that such questions should be seriously asked." P. 332.

The new course proposed is inferior, considered as an introduction to a general knowledge of literature and as a mental discipline. It affords no preparation for professional study. We would by its introduction lower the standard. We must study modern literature through the ancients. "To begin with modern languages in a course of education is to reverse the order of nature."

Modern languages are studied as an accomplishment. They are not practical. "The proper question is, what course of discipline affords the best mental culture, leads to the most thorough knowledge of our literature and lays the best foundation for professional study?" P. 333.

"Deficiencies in modern literature are easily and rapidly supplied when the mind has had a proper previous discipline; deficiencies in ancient literature are supplied tardily, and in most instances, imperfectly." P. 334.

The middle course, college preparation in the classics, afterwards the modern language course, is of no value as the classics would not be pursued far enough. Its graduates would be poorly prepared to teach ancient languages and the course of instruction would suffer under their management.

The conferring of a common degree on the pursuers of the different courses would give the shadow but not the substance of a college education; the diploma instead of the training.

Modern language training is not liberal. Ancient literature is too deeply woven into the whole system of the modern literature of Europe to be so easily laid aside. P. 335.

The college faculties who advocate such a substitution will be considered "visionaries in education, ignorant of its true design and objects and unfit for their places." P. 336.

College would lose reputation.

Can we admit special students?

"The objections to such an action are obvious and clear. Here both classes of students would injure each other." P. 336.

There is no wide demand for change. By persevering in the course of conferring degrees on those only who have been thoroughly disciplined in both ancient and modern learning, the college has much to

2. The importance that is given to discipline in intellectual culture.
3. The desire expressed for a well-rounded development of the student and the awakening of his self-activity.
4. The methods used are those of lecture and recitation from text-books and examinations.
5. The constitution of the faculty at this time; Tutors and Professors.
6. The aim of the college is defined as "laying the foundation." Differs from Professional and Trade Schools. It is a course in *principles*.
7. Our present system is all-inclusive and nothing can be omitted.
8. All can be comprehended by every one. The course is adapted to the age of the students and to their qualifications when they enter college.
9. We cannot omit it and we have no funds to provide a parallel course, even if this were to be a desirable condition to our scheme.
10. A parallel course is undesirable as it would lower our standard by admitting more badly prepared students and give to the lazy a superficial college course easier than the present and so cheapen the degree.
11. A partial course is of no value whatever.
12. Our value as a college demands we give the best education. In Professor Kingsley's argument we notice:
 1. The importance he gives to the practice of European Universities.
 2. All scholars possess classical culture.
 3. Value given to classical training as the means of cultivating taste and providing us with proper standards.
 4. It is wholesome discipline.
 5. It prepares for all professional work.
 6. Inadequacy of proposed substitutes.
 7. Ease with which these can be had later.
 8. Middle course classical preparation modern languages in college denounced.
 9. Censure that would follow innovation.
 10. Change not widely called for.
 11. Change would be too radical and would lower our standard.
 12. College is not stationary nor opposed to change.
 13. Contrast between 1714-1828.
 14. College aims to keep abreast with the times and do its work thoroughly.
- Governor Tomlinson's recapitulation includes:

"The condition of things abroad and in the learned world generally."

 1. The fatal example of France.
 2. The universal demand in America for classical culture and its necessity to our liberty.
 3. The usefulness of the classics to the professional man and as a means of discipline to the general student.
 4. Modern culture is based on them and cannot be understood without them.
 5. No change is desirable except one based on increased requirements for admission.

These points are all of them important. Many of them are argued

and moral worth lowered, and our civil and religious liberty jeopardized by ultimately disqualifying our citizens for the exercise of the right and privilege of self-government." P. 346.

Knowledge of the classics is useful, "decidedly and positively useful" (P. 346) "in the intellectual discipline of youth." Such a study carries the young pupil back to the earliest era in the history of mental efforts, lays open to him the most simple and original operations of the mind and acquaints him with its brilliant and unrivalled productions. It stimulates to industry and faithful application by proving to the student that the mines of learning can be penetrated only by unceasing exertion, while it admonishes him of the fate of genius when unaided by deep and laborious research. The student's memory is thus rendered retentive, his recollection quick and his power of critical discrimination more accurate. The student can hardly fail to improve his taste and to enlarge his capacity to think and to communicate thought." P. 346-7.

It awakens an ardent desire for knowledge. His imagination is fired, his judgment enlightened and guided.

Time is not lost in pursuing them. Who would consent to part with the mental discipline the study of algebra imposes? Shall we lay aside Euclid? These give vigor to the mind and generate a habit of close and connected thought. These are as practical as classics and both are necessary.

The Greek language is accurate and perfectly formed. "If for no other reason, as a means of cultivating a knowledge of the philosophy and powers of language and improving taste and style, languages should be early, faithfully and perseveringly studied." P. 348.

They are useful to the learned professions, law, medicine, divinity.

"The single consideration that divine truth was communicated to man in the ancient languages ought to put this question at rest and give to them perpetuity." P. 349.

These languages are the basis of the modern. We must approach the latter through the former. French, Spanish and Italian may be easily acquired by one who is versed in Latin, and suitable facilities should be continued to all who may signify their desire to study those languages when properly advanced in the ancient. P. 350.

It is inexpedient to alter the course. The committee see with approbation the increased attention that has been given them in the college in the last 25 years and that the conditions for entrance have been increased. The committee await a recommendation of the faculty to increase these latter and still higher to raise the standard.

In discussing this report we observe:

1. The age of the students concerned. The superior education is to be provided "at a period when a substitute must be provided for parental superintendence." This period begins at the age of fourteen.

"Though the limit of age for admission is fixed by our laws at fourteen, yet how often have we been pressed to dispense with the rule in behalf of some youth who has completed his preparation at an early period." P. 317.

2. The importance that is given to discipline in intellectual culture.
3. The desire expressed for a well-rounded development of the student and the awakening of his self-activity.
4. The methods used are those of lecture and recitation from text-books and examinations.
5. The constitution of the faculty at this time; Tutors and Professors.
6. The aim of the college is defined as "laying the foundation." Differs from Professional and Trade Schools. It is a course in *principles*.
7. Our present system is all-inclusive and nothing can be omitted.
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9. We cannot omit it and we have no funds to provide a parallel course, even if this were to be a desirable condition to our scheme.
10. A parallel course is undesirable as it would lower our standard by admitting more badly prepared students and give to the lazy a superficial college course easier than the present and so cheapen the degree.
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A truly modern note is struck in the next paragraph, when the omission from the college course of history and of the science of government is deplored, the Romance tongues are shown to be neglected, and "my son" is "compelled to spend nearly four years out of six in the study of the dead languages, for which he has no taste, from which he expects to receive no material advantages, and for which he will in fact have but little use after his senior examination."

The report says that these complaints are made "by men whose strong good sense, education and standing in society entitle them to be heard," and "that the majority will be apt to contend, that in an age of universal improvement and in a young, free, and prosperous country like ours, it is absurd to cling so tenaciously to the prescriptive forms of other centuries; and to meet every call for instruction in Modern Languages, Literature and Improvements with the cry of innovation."

In the first report the faculty vaguely hints at the establishment of a parallel course of study to meet the public desire for instruction in the romance tongues and in history. It also emphatically urges the novel idea of the immediate establishment of a department of the *Science of Education*.¹

"When it is considered how this lies at the very foundation of all improvement: and when so many Professorships have been established in all the other sciences, as well as in literature and the arts, it is truly wonderful to us, that so little attention has been bestowed upon the science of mental culture, and that there is not, (as we believe there is not) and never has been, a single Professor of Education on this side of the Atlantic. Will it not be an honor to that College, which shall be the first to supply this deficiency and open a department for the thorough education of teachers?"

Union College in Schenectady, New York, had in 1802² ad-

¹ Horace Mann was not yet (1826) a member of the State House of Representatives.

² "Laws of Union College.

1802.

Sec. 9. Whereas there may be students not designated for those learned

vocated some provision for the non-professional student, but the Amherst faculty seems to have been among the earliest in college annals to publish a plea for a department of Education.

Six months later, in the following December, these gentlemen become more specific in their suggestions of reform, sketch their parallel course in outline, and more positively urge their scheme for *the new department*.¹

professions in which the knowledge of the Greek language would be indispensable; it is ordered, that such students, on exhibiting satisfactory evidence of their having made such progress in the French language as to be able to read and translate it with facility, may be admitted without the knowledge of the Greek language, provided they are in other respects qualified. All such students, while the class to which they belong are studying Greek, shall study the French language, and recite to some person appointed by the Trustees for that purpose, to whom such students shall make the compensation required by the Trustees, in addition to the usual bill of tuition. Should any of the other students be desirous of learning the French language they may obtain permission to attend the French instructor, under such regulations as the President may prescribe."

¹ Report of Amherst Trustees, p. 13.

.... "Our decided and unanimous judgment is, that if a new course is introduced, it ought to proceed on a most liberal scale. By whatever name it may be called, it should be fully equivalent to the course which we now pursue. It should fill up as many years—should be carried on by as able instructors—should take as wide and elevated a range—should require as great an amount of hard study, or mental discipline, and should be rewarded by the same academic honors.

In presenting to the Trustees an outline of this parallel, or rather equivalent course, we find considerable difficulty in giving it a sufficiently distinct character of its own; arising chiefly from the many coincidences which our plan contemplates, and we ought perhaps, thus early to premise, that should it be adopted, experience will doubtless ere long suggest important modifications and improvements.

In the department of Languages, an entire separation is proposed, by substituting the modern for the ancient, provided however, that in the new course, Latin may be taken instead of the Spanish, at the option of the student when he enters College. Thus, with the knowledge of Greek and Latin, which all who enter will be required to bring along with them, it is thought they may in four years, so far master the French and Spanish, as to read and write, and even speak them with considerable fluency. Should room hereafter be found for German, or Italian, or both, so much the better; but we deem it inexpedient to begin upon so broad a scale. The adoption of our general plan will make the two courses more distinct in the department now under consideration, than in any

Abortive as was this effort, and the kindred one at the University of Vermont, they together show how widespread had, by this time, become the interest in college affairs. A

other. But the new course will differ from the old in several important respects, which are yet to be mentioned: as

First. In the prominence which will be given to English Literature, than which no subject has higher claims upon the American scholar, or can more richly reward his diligence. We do not mean to attach any blame to the College, for having done comparatively so little hitherto, in this department, for who can teach everything in four years? But we believe the time has come, for the more critical study of some of the admired classics in our own language, by a portion at least, of the liberally educated in every College.

Second. The new course will differ essentially from the old, in the attention which will be given to French and Spanish Literature, by connecting this branch of study, with the recitations and other exercises in these two rich and popular languages.

Third. In Mechanical Philosophy, by introducing some such text book as, "Nicholson's Operative Mechanic and Mechanist;" and by multiplying and varying the experiments, so as to render the science more familiar and attractive.

Fourth. In Chemistry and other kindred branches of Physical Science, by showing their application to the more useful arts and trades, to the cultivation of the soil and to domestic economy.

Fifth. In a course of familiar Lectures upon curious and labour saving machines;—upon bridges, locks and aqueducts; and upon the different orders of architecture, with models for illustration.

Sixth. In Natural History, by devoting more time to those branches which are now taught, and by introducing others into the course.

Seventh. In Modern History, especially the history of the Puritans, in connection with the Civil and Ecclesiastical history of our own country.

Eighth. In the elements of Civil and Political law, embracing the careful study of American Constitutions. To which may be added Drawing and Civil Engineering, together with some other branches perhaps, which are not specified in the foregoing enumeration. Ancient History, Geography, Grammar, Rhetoric and Oratory, Mathematics, Natural, Intellectual and Moral Philosophy, Anatomy, Political Economy and Theology, will, upon the plan here recommended, be common to both courses. This plan may be presented at a glance in the following illustration.

Two friends set out the same day from Boston, or New York, for the City of Washington. But as they have not precisely the same objects in view, and are led by curiosity, or business to visit different places lying a little off from the general route, they make their arrangements before they commence the journey, where to separate and where to meet again—when to travel in company and when to take different roads and conveyances; but so as to advance with equal speed, and reach the seat

comparison of the dates of these early suggestions of reform in scholastic methods, with the actual realization of the scheme in practice, shows how gradual has been the course of altera-

of Government on the same day. Thus would we have, not two distinct classes of the same standing; but two divisions of the same class, advancing through four years in their respective courses, now in company, and now by separate paths; but under such an arrangement, as shall bring them both out together.

To encourage and reward uncommon proficiency in either course, provision might be made for extra recitations in both. Thus, for example, the regular student in Greek and Latin, might employ his spare time in the study of French and Spanish; while another might pass over from the new to the old course, and take lessons in Latin, Greek, or Hebrew.

We are fully aware, that the outline which we have thus hastily sketched, requires much filling up; and that it will be found no easy task, to select text-books and spread out the new course in all the details of four years' study. But it can be done; and should this part of our plan be sanctioned by the Trustees, any aid which we can lend will be most cheerfully afforded.

The Board will recollect, that in our first Report, we ventured to express a decided judgement, in favour of a *new department* for systematic instruction in the science of education; and all our subsequent thoughts on the subject, have conspired to strengthen the opinion which we then entertained. Indeed, we look at this chasm, in the most complete and popular systems of an enlightened age, with increasing wonder. Why has it been suffered so long to remain, or rather why to exist at all in our public seminaries? No respectable College would think itself organized, without a department of Natural Philosophy, and another of Chemistry—nor without Professors in Rhetoric and the Languages; and yet, how few who enjoy these advantages in College, expect ever to be practical Chemists, or Philosophers, or Critics. How then can the most distinguished and useful literary institutions in the land, go on from year to year without a single instructor devoted to the science of education, when three-fourths of their sons expect to be teachers, in one form or another themselves, and when the primary schools, academies and higher institutions of learning, require twice, or thrice as many thousands to supply them, as are wanted for all the learned professions together? Every third or fourth man we meet, is, or has been a school-master; but who among a thousand of the best qualified, was ever regularly instructed himself in the science and art of teaching, for a single quarter? And to rise still higher, who that daily gives lectures, or hears recitations in College, does not find reason to regret, that when he was a student, the analysis of mind was so little known or thought of, with reference to the science of education. Who, in short, is so old, or so wise, that he would not gladly take his place as a learner, under a competent Professor of this noble, but strangely neglected science?

tion in the curriculum of the college in the United States. Decisive action on the part of any institution is, in 1828, many years away. The next three decades are the period of ex-

We feel confident that the time has come to supply this great desideratum. The public is not only prepared for it, but loudly demands it, and will, we are perfectly assured, rejoice to see the Trustees of this College, acting definitively on the subject. Nor, if we judge correctly, will an enlightened community be satisfied with any but the most comprehensive and liberal views, in the establishment of this new department. To occupy the whole ground, will require,

1. Much time and talent in the selection, revision and compilation of elementary school-books.

2. An experimental school, consisting of young children, under the entire control of the department, where students may have opportunity, to learn the art of teaching from example, and in which new methods of instruction may be tried, and the results carefully recorded.

3. Adequate provision for the systematic instruction of school-masters, in all the branches of education, which they may have occasion to teach in our primary or district schools, together with the theory of teaching and government.

4. An able and connected review, or rather series of reviews, of all the popular systems of education now in use, particularly in our own country, with free and critical remarks upon College text-books.

5. A course of lectures annually by the professor on the science of education, for the particular benefit of the regular members of College, but which other young men, wishing to qualify themselves for teaching, might be permitted to attend.

Less than this, ought not to satisfy public expectation from the department, when time shall have been allowed, and means provided for its complete organization. But we do not think it necessary to occupy the whole ground at once. Let the system be introduced gradually, and with ultimate reference to the most ample enlargement. As the first and most urgent call is for good teachers in the common schools, let arrangements be made, as soon as practicable, to receive a limited number of young men, and put them upon such a course of study, as when successfully completed, will entitle them to a certificate from the department.

The details of instruction, study, examinations, tuition fees and the like, we purposely omit in this Report; our object being simply to present an outline of the improvements contemplated in the general plan. It is obvious to remark, however, that a department for the education of school-masters, offers some advantages by being connected with a respectable College, which cannot be enjoyed at so cheap a rate, in a separate institution. Competent professors in Natural Philosophy, Chemistry, Natural History and Rhetoric, commodious lecture-rooms and costly apparatus, are already provided for other and higher purposes; and the

periment and of vigorous discussion. Permanent change and alteration from the prevailing mode are not witnessed. As President Wayland of Brown University phrases it:¹ "A college must, of necessity, be in some sort a legally established foundation, and precedents and usages grow up more rapidly and sink their roots deeper in this soil than in any other. And this is more particularly the case where a number of institutions are united together to accomplish a similar object. If formed on the same model they create a necessity, to a considerable degree, of similarity of action. It is practically difficult for anyone to deviate from the others, and hence a course which each one allows to be unwise, will frequently be persevered in by all, because no one is willing to incur the disadvantage of being the first to separate from the rest."²

But with this first third of the nineteenth century began that long and distinguished procession of scholars from the colleges in the United States to the German Universities.³ The return of these students brought with it an invigorating infusion of new thought and aspiration. "One went to Germany still a doubter as to the possibility of the theoretic life: one returned an idealist, devoted for the time to pure learning for learning's sake, determined to contribute his *Scherflein* to the massive store of human knowledge, burning for a chance to help to build the American University."

Gradually does the isolation of the individual colleges become a thing of the past. Friendly co-operation takes the place of jealous suspicion, and the breadth of culture, that contact with European life and learning advanced, made the narrow routine of text book recitation too restricted for the col-

aid of most of these, is very important, if not essential, to every man who is to assist, in educating the children and youth of this great republic. A literary atmosphere too, exists in the precincts of a College, which though free as common air, is never formed at once, but is gradually and expensively created."

¹ Thoughts on the Present Collegiate System. Francis Wayland, Boston, 1842.

² See *Report Commissioner of Education*, 1898, p. 610.

³ J. Royce, in *Atlantic Monthly*, 1891.

lege class rooms. The progress toward *Lehr und Lernfreiheit*, which had already made the Scotch and German institutions famous, found here an even more fruitful field. The movement of the curriculum since 1828 may, in fact, be briefly summarized as the reconciliation of these notions with the ideas that, up to this date, had influenced most of our academic ideals and practice. Already introduced, as we have seen, in William and Mary, and perfected in the University of Virginia, it required the remainder of this period of transition, from 1828 to 1868, for the more liberal notions to gain general ascendancy in college thought. One initiative to this progress is to be found in the return of the American scholars after studying abroad.¹

It is important to note that this influence as henceforth operative is, from the first, a distinctly German influence, and that nothing in our subsequent collegiate history has been able to re-establish in power the prestige that, at the close of the Revolution, seemed awaiting the newly introduced ideas of French education and culture.

Our colonial colleges were English in their traditions and curriculum. These modern modifications of methods and material have been German in their origin. But the essential character of the structure has never been altered, the assimilation of the foreign strain has but strengthened and more deeply rooted the native stock. The purpose in the minds of

¹ At Harvard: "To George Ticknor, the eminent scholar who occupied the new chair of modern languages from 1816 to 1835, the honor is principally due for the inauguration of the elective system. In the years 1825-26 and 1826-27 a new arrangement of the studies was effected by which three hours a week throughout the course, with the exception of the first third of the Freshman year, was given to elective studies. These studies were, in the Freshman year, Greek, Latin and Modern Languages; in the Sophomore year, Greek, Latin, Mathematics, and Modern Languages; in the Junior year, Greek, Latin, Mathematics, Hebrew, and Modern Languages; in the Senior year, Greek, Latin, Mathematics, Chemistry, Mineralogy, Geology, and Modern Languages." James Barr Ames, in *The College Book*, Boston, 1878, p. 17.

See also *Life, Letters and Journals of George Ticknor*, Boston, 1825, vol. I, chap. 17.

the fathers—the founders—is the ideal still present to the sons, their successors, and the curriculum of the latest catalogue of the youngest college reveals, as clearly as the earliest program of Henry Dunster, the scheme of William Smith or the Report of the Faculty of Yale, the purpose of the officers of each special institution, to offer a list of studies as well adapted, as in their judgment they deem possible, to fit the students committed to their care intelligently to participate in the present purpose of the culture of the social consciousness, and as graduates to go forth to join heartily in the labors and the hopes of the spirit of the age.

It was on June 2, 1829 that this thought found most eloquent expression when Josiah Quincy was inaugurated president of Harvard College. "*The Spirit of the Age*" was the theme of his Address. "The wants of the age; and the duty of literary seminaries to keep pace with that spirit and to supply those wants."

Suitable as an introduction to his distinguished career as a college executive is this document.¹ Interesting is it, as a piece of scholarly English oratory, dignified and chaste. It is important for us as a clear exposition of the place and purpose of the college in the United States and as permitting us to leave the debate, concerning questions of college methods and college practice, upon the high plane of discussion of principles. That this discussion, in the later day, lost some of its coolness and removed all dialectic subtilty from its phrases, is beyond our purpose to show. Time would be lost in following the windings and the twists of the interminable argument that has pursued the college curriculum from that day. In 1870, President Noah Porter of Yale stated with emphasis the conservative position in "*The American College and The American Public*,"² to be followed in 1883, by a no less energetic setting forth of the other view in an

¹ Address of President Josiah Quincy, H. U. A., I 6.46.

² "*The American College and the American Public*," Noah Porter, D. D. Chas. Chatfield, New Haven, 1870.

address on the "College Fetich,"¹ by Charles Francis Adams, Jr., before the Harvard chapter of the Phi Beta Kappa. It is sufficient to note that the ideas enunciated at Cornell in 1867² are strikingly like those published at

¹ "A College Fetich," Charles Francis Adams, Jr., Boston. Lee & Shepard, 1884.

² "Features of the University.

First. *Every effort will be made that the education given be practically useful.* The idea of doing a student's mind some vague general good by studies which do not interest him, will not control. The constant policy will be to give mental discipline to every student by *studies which take practical hold upon the tastes, aspirations and work of his life.*

Second. *There is to be University liberty of choice.* Several courses carefully arranged will be presented, and the student, aided by friends and instructors, can make his choice among them.

When we consider that young men are constantly obliged to make choice unaided in regard to matters of even more difficulty and danger than courses of study, it will not be thought so absolutely necessary that but one single course should be allowed, and all men of all minds forced to fit it.

Third. There will be no Fetichism in regard to any single studies. All good studies will be allowed their due worth. While the beauty and worth of the ancient classics will not be denied, it is hoped to give the study of modern classics, especially those of our own language, a far more important place than they have hitherto held in our colleges. Special attention will be paid to these.

Fourth. Historical studies and studies in Political and Social science will be held in high honor, and will have more attention than is usual in our higher institutions of learning. Beside thorough regular courses, it is intended to present special courses of lectures by non-resident professors of eminence.

Fifth. There will be no petty daily marking system, a pedantic device which has eaten out from so many colleges all capacity among students to seek knowledge for knowledge's sake. Those professors will be sought who can stir enthusiasm, and who can thus cause students to do far more than under a perfunctory piecemeal study.

Sixth. It enters into the plan adopted by the Board of the Cornell University to bring about a closer and more manly intercourse and sympathy between Faculty and students than is usual in most of the colleges.

Seventh. The study of Human Anatomy, Physiology and Hygiene, with exercises for physical training, will be most carefully provided for.

Eighth. The Cornell University, as its highest aim, seeks to promote Christian civilization. *But it cannot be sectarian.* Established by a general government, which recognizes no distinctions in creed, and by a citizen who holds the same view, it would be false to its trust were it to seek to promote any creed so as to exclude any.

Amherst in 1826: that the reform of the Curriculum of Harvard, instituted in 1868, are in great measure the fulfillment of ideas formulated by President Quincy in 1841 and that the fundamental maxims that now govern the thought of collegiate educators are largely those contained in the inaugural address of this seventeenth president of the earliest New England college.

This inaugural of President Quincy is far from being a revolutionary document. Its tone is essentially moderate and its confession of faith is one to which the most conservative of his contemporaries might well subscribe. But a catholicity of liberality is discernible in its pages that bodes well for the future of the institution committed to his charge and the author takes a breadth of view of the exigencies of the time wonderfully comprehensive.

"The spirit of the age," Quincy says, "takes its chief character from the abundance and general diffusion of the intellectual principle which exists, or is supposed to exist, in it."

This intellectual principle is aided and developed by Education.

Each age has employed its own methods for attaining this end.

"The labor of the last and present age has been, however, efficiently directed to soften the rigor, and break the shackles of this ancient discipline, to remove obstacles from the path of the intellect and to supply it with aids and encouragements." "Both in Europe and America attempts are making to rescue

The State of New York, in designating this institution as the recipient of the bounty of the general government has also declared the same doctrine. By the terms of the charter, no trustee, professor or student can be accepted or rejected on account of any religious or political opinions which he may or may not hold.

The success of the University of Michigan, where the Faculty comprises men of all religious sects and of all parties, is a sufficient refutation of those who assert that an institution of learning must be sectarian to be successful.

1st Gen. Announcement, Cornell University, 1867.

"First term will open Sept., 1868."

the general mind from vassalage in which it has been held by sects in the church, and by parties in the state; by giving to those interests, as far as possible, a vitality of its own, having no precarious dependence for existence or subserviency to particular views in politics or religion and for this purpose to place them like fountains, opened in regions elevated far above those, in which the passions of the day struggle for ascendancy, to which, all may come to gain strength and to be refreshed; but whose waters none shall be permitted to disturb by their own tumult, or exclusively preoccupy for their ambition."

Whatever methods have been employed in education have always been liable to criticism. But condemnation of methods and means have sometimes proceeded without just cause.

"The agents, means, and modes, adapted to excite and direct the immaterial principle are at present distributed throughout the community, in certain institutions, which may be all properly enough called schools." "To these may be added the great school of the world, for which all the others are preparatory, which though generally omitted in such enumerations, is as much a school as any other; is of all others, the most important and has the most influence upon man's future destiny." . . . "Its masters teach by example; they labor with great assiduity to keep pace with the general spirit of the age; they bring their minds into direct contact and familiar intercourse with those whom they teach; and the scholars are advanced according to their individual powers and acquisitions, being taught, not in classes, but as individuals."

"How far any of these principles of education which are adapted in real life can be introduced into the system of other schools farther than they are at present, may be a useful subject of thought."

Thus it is that the possibilities of the elective system of studies is cautiously introduced.

Criticism of the college course and the methods of the schools have been frequent in recent years, says Dr. Quincy, "for their lack of advancement to meet the spirit of the age." But he seems to think that some of these attacks are not wholly justified.

"In consequence of the spread of letters and love of reading in the community the demands for literary accommodation have increased to an unexampled extent; and the supply has, as is usual in such cases, kept full pace with the greatness of the demand."

Nor should all the demands of the age be granted.

"The spirit of the age requires to be watched on the subject of the claims which what are called its wants, are perpetually making on the greater institutions of learning and public education."

It is a conservative course that the president advocates. Placing before himself a high ideal of the mission of the college as the guide and inspiration of the community, he shows how this excellent service can be rendered not only without loss of dignity, but with added lustre to its reputation, and in conclusion points out how this very widening of the streams and broadening of their channels makes it imperative that the sources, kept pure and undefiled, must be deepened and made to flow even more abundantly.

The truth that lies in his words, in regard to the service of the college, needs no comment. His cordial reception of the advantage of special-course students is significant, asserting as he does the integrity of the aims of the course that leads to the degree.

"On the one hand it is the duty of those who conduct or influence the institutions to foster the spread of intellect in the community and to encourage that noble disposition, which characterizes the age, to take delight in literary works and attainments, and seek in them a refuge from meaner and grosser pleasures. On the other hand it is no less their duty to yield nothing to any temporary excitement, nothing to the desire of popularity, nothing to the hope of increasing their number; nothing to those morbid cravings for farther supply which the cheapness and abundance of exhilarating literary elements and their evaporating qualities have a tendency to create. If anything be done under such circumstances of the nature of innovation having any critical effect, it ought to be

after a thorough investigation of the consequences on the permanent interests of science to the community. In this respect the conductors of such institutions have a great trust confided to them, nothing less, perhaps, than the intellectual health and power of the coming and future ages. Whatever is done in respect of innovations in such institutions ought to be for distinct and well-defined purposes, with known limitations and restrictions, which on no condition should be permitted to be passed."

"So far as the spirit of the age restricts itself to a demand for a free access for youth to our greater seminaries of learning, for the purpose of enjoying the advantages of their libraries and general instruction, not requiring that such a connection should be deemed as entitling them to the honors of the institution, nor that it should in any way affect the known and long established standards of collegiate education; there seems to be no reasonable ground of objection. Facilities of this kind seem to me both in accordance with the spirit of the age and a just tribute to it."

"Of all the duties incumbent upon those who influence the public mind in this respect, the most important is in diffusing and establishing by both precept and example right opinion concerning the true standard of a sound and thorough public education, and to this end raising, as far as possible, college honors, by making them more and more evidences of actual individual attainment. The true mode of conduct in this respect seems to be to distribute liberally the stream of science over the lower grounds, and at the same time to strengthen, purify, and elevate the higher fountains."

"In proportion, as the value of intellectual attainments is appreciated in any community does the desire become general and intense to place the means of possessing them within an easier reach, and to extend them to a larger class of society. Two modes naturally present themselves, as having an apparent tendency to effect these objects: the one is to multiply the number of literary institutions of the higher class; the other to open the doors wider of those which exist."

“ ‘It is better,’ says Lord Bacon, ‘in a fair room to set up one great light or branching candlestick of lights than to go about with a small watch candle into every corner.’ The great interest of society in this respect is,” continues Quincy, “that the number of great seminaries of science should be few—that they should be highly endowed, and so constituted, as to become if possible the centre of action of those minds of great power, which in every passing period exist in the community.”

“Just in proportion as the interests of society and the community require that the great seats of learning should be few, and that their endowments should be of the most liberal kind, ought the authorities and vigilance of society to be directed, to take care that those who conduct those institutions, are faithful, are capable, and are using their advantages for the real ends of their appointment; the elevating, extending and purifying the intellectual principles of the community. Just in proportion to the importance of having these institutions few and powerful, ought they to be watched and abuses in them prevented. If they adopt principles tending to shackle the mind, to restrict freedom of inquiry, to check the spread of light and knowledge or are deficient in any other material requisite for rapid and lofty advance, public opinion ought to be brought to bear upon them with a rectifying strength.”

“With respect to the opening an easier access to the general advantages for literary improvement, which the higher seminaries of learning possess, under the limitations already suggested, it is apprehended that no possible injury can result. But in proportion as such privileges are multiplied, the true particulars in which alone a thorough and perfect liberal education consists, in conformity with the long established principles and practice of the literary world, should be adhered to, with pertinaciousness which an enlightened sense of duty and a clear conviction of truth on a subject inseparably connected with the best hopes of the republic of letters should inspire. Subsidiary to which raising the standards of public education and making the honors of such institutions more dependent upon actual attainments and less a matter of course, seems desirable.”

“The more and farther you would spread the streams, the higher must you seek and the more must you strengthen the upper springs. There can be no surer precursor of want or barrenness than to have the waters in the head fountains not higher than the level of the surrounding country.”

It has seemingly needed the full course of a long and tedious debate to wring forth the whole truth that lies in the words of the venerable president of Harvard. The pertinency and force of these words have surely not diminished by the lapse of time. Possibly we may find in them added weight and a significance that their author, from the circumstance of his environment, could hardly know. Maybe we read between the lines more than the local and particular reference permitted him to see. But we can hardly err in calling this inaugural the statement of the aim that the college in the United States has forever since striven to realize. The preceding pages have endeavored to reveal in what way the successive programs of studies, by college law established, have tried to bring to practical and local application the realization of the ideal.

CHAPTER VI

MODERN REFORM

FROM the year 1870 the growth of the college in the United States has been steady and constant. Its aim has become more and more clearly defined. The interest of the public in its welfare has continually increased. Sympathy with its work has been enlarged and the funds at its disposal have been augmented as fast as an intelligent appreciation of its needs and its resources, its wants and its possibilities, have been realized. During this period of thirty years there has been a great change in its equipment and methods of teaching. *The laboratory system* has been introduced, or enlarged in its application, to include almost every field of scholastic endeavor. Presented, at first as the ally of science, it has demonstrated its usefulness in language, literature and art, and has won favor, not only with advanced students, but even with elementary pupils. The effect on scholarship of this change of method has made for thoroughness and accuracy. More and more does it discount superficiality and realize that ambition of the advocates of formal discipline, "*training*." With artificial barriers removed and the attention of the student excited by intimate contact with the materials of the subject, the work of the instructor has become guidance where goading was formerly the prime requisite for success in teaching.

If we trace our earlier collegiate impulses to Cambridge, to Oxford and to Scotland, the later force is manifestly German in its origin. The experience of scholars who studied on the continent of Europe, applied to our own methods wrought—not a revolution, for there was nothing rash or sudden in the movement of change—but a gradual alteration in the plans and announcements of courses of study. Little by little

"seminaries" were opened, sometimes as *praemia*, or privileges, for honor students as were formerly the "private classes;" again, we find these conferences declared to be optional, extra, classes meeting in the evening, or at the house of the instructor. Sometimes they take the form of clubs and associations with a printed list of officers and a noted scholar invited to deliver the annual address. In elementary grades an additional hour is appointed for conference and consultation, when the difficulties of the immediate lecture are gone over and explained. Possibly this work may be delegated to a tutor, or to an advanced student, who thus gets his training in teaching and demonstrates his fitness for more formal work.

With this movement came also the *opening of the libraries* to students and the free use of the treasures contained on their shelves. The fears of the guardians of the venerated collections of election sermons over the havoc that might be wrought by disturbing the dust the years had spread on the ponderous folios was only equalled by their astonishment at the unceremonious manner with which the most cherished possessions were pushed to the upper gallery and the lower cases made heavy with original sources of philosophy, literature, and history, to be handled and studied by college undergraduates. To us, of this day, the regulations regarding the library in the old college laws and statutes appear strangely weird. In the early time the scarcity of books made collections of them doubly precious, and the juvenility of most of the students probably suggested the desirability of some restrictions. Yet it seems as if many of the disturbances and disasters of the colonial and early nineteenth-century college youth might have been avoided if vagrant ambition had been directed toward literary ends by granting free use of such books as the college library had at its disposal.

Much certainly would have been saved in turmoil and discord between college authority and students had the importance of *systematic exercise* been earlier understood. To-day the excessive indulgence in intercollegiate contests is prominently deplored, and the taint of professional-

ism destroys the glory of many an amateur academic victory, yet the interest these sports excite and have excited since the beginning of the various series has, on the whole, been stimulating and healthful to collegiate student ambition. The importance of the correct life has been gloriously vindicated, and the ideal student is no longer the narrow-chested, thin-voiced biped, the remote recluse, but a man, vigorous, energetic—alive to the possibilities of his own powers, mental, moral and physical, intent on improving his opportunities for growth in the three categories whose equal importance he fully recognizes. This change of view of physical exercise and the equipment of well organized gymnasiums in the colleges in the United States has occurred mainly since 1870.

The *liberalizing and equalizing* of studies in the curriculum since 1870 is too well known to require extended comment. The value of academic freedom to the undergraduate, as well as to the members of the teaching force, has been sufficiently vindicated in print and in practice. The advance in the average age limit of the entering class, immediately following the close of the civil war, the stimulus to the national life that this event occasioned, and the general appreciation of the latent manliness, and delight in personal responsibility, manifest in American youth, led naturally to the general adoption of the elective system of study in the curriculum of the college. It makes no special difference at what institution the actual experiment was first successfully launched. The history of the course of study shows that in almost every one of the older colleges more or less freedom of choice, in certain lines of work, has been tried, at different times. William and Mary emphatically approved this plan in 1779; it was elaborately exemplified in the University of Virginia in 1820; Hobart and Union Colleges and Brown University before the middle of the century had put it in active operation. These are mere indices of the power of the idea. It needed but the voice of a leader and the fullness of time to establish the vitality of the plan and its practical usefulness in the curriculum of the college in the United States.

It is a truth, now become axiomatic, that the great fact in education during the past thirty years has been *the discovery of the individual*. The courses of study in kindergarten or university are not for general but for special use. To turn a phrase, it may be said that no longer is the student prepared for the college but the college for the student. His "training" is his growth, his "discipline" is his development. The artificial stimulus by laws of compulsion has given place to a cordial recognition of his requirements and of the essential value of his suitable adjustment to the possibilities of his future environment. Critics of the elective system assert that its general adoption creates a class of lazy ne'er-do-wells who finish college weaker in moral fibre than when they entered. But did the required routine eliminate this class of students or create, in every one, a zeal for learning? Were manners, morals and government more simple under the required curriculum than under the elective system? And if, because some boys now attend college who are not prepared to appreciate its benefits, is it by any means certain that the rolls of the graduates of the former days were wholly composed of earnest, conscientious, highgrade scholars?

More and more has it become established since 1870 that the college in the United States is not a reformatory, is not a house of correction, is not a place of discipline nor a free school. It is not a shop for apprentices, nor an asylum for incorrigibles. Nor is it, any more than in 1753, a secluded resting place for the lazy and the idle. *Its ideal is culture*. Its fundamental requirement is moral character. Its intellectual standards for entrance demand capability and capacity. Its usefulness to its clients is demonstrated by the increase of power for service that attendance upon its peculiar exercises furnishes to each and to all. The elective system has given the college a power to help and to encourage the individual student which no device of faculty regulation of required class exercises was able to supply. Moreover it has demonstrated the practical worth of the academic course. It has given to the sciences and to history and to the modern literatures a

chance to show what claims, if any, they have on collegiate consideration. The elective system has forced the definition of the standard of academic value and has effected the circumscription of the bounds which separate the college course from the territories of the school and of the university. Its practical result is seen in the Report of the committee of Ten published in 1892.

The establishment of *special schools for science*, entrance to which is conditioned only by the completion of secondary work, has aided in this differentiation of the sphere of the college in the scheme of education in the United States. Increasing definiteness in the requirements for entrance on a purely professional course of study, and the enlargement of the scope of the demands made by these advanced schools on candidates for their privileges, coupled with the growing accuracy of understanding by the public as to what course of study is best adapted to fit American youth for American citizenship, have all aided in establishing the college curriculum within definite limits. Trade and purely technical work are elsewhere provided for. The notion that the college course is fundamental to advanced study has given definiteness to the individual preferences of students. The direct correlation that they see existing between active participation in public affairs and knowledge obtained in college has given impetus to their choice of studies. Erratic choices there may be, in isolated instances, but these only prove the rule that the American youth, on entering on a course of collegiate study, is well able to decide what is fitted for his own betterment. Certainly he can judge the question with as much wisdom and with more interest in the subject, than can a body of men who are engaged in providing business for a collection of entities known abstractly as the Freshman class.

If the elective plan was accused of lack of system at its beginnings the charge is no longer to be considered seriously. Liberal as are its provisions, and comprehensive as is its scope, an examination of the recent catalogues of the college reveals that its factors are now clearly defined, and the pro-

day of many books easy of attainment, and there is no inherent reason why in our scheme of education, the small suburban college should not strive to offer to students the richest and most completely organized training in these profitable fields of human endeavor.

"The humanities should be definitely embodied in the purpose of the institution just as science is embodied in technical schools. It is passing strange that no small college has yet come to a full consciousness of itself to feel this divine call."

Yet the age of specialization is with us, and the differentiation of subject-matter has passed to minute dissection since 1870. As the university work emerges from the college course the selective inclination among students has made itself manifest. The tendency has become marked whereby the advanced students seek the most complete equipment in their special branches by establishing residence in those universities which can offer the largest facilities for study in the chosen field. Libraries, laboratories and the fame of the professor as a student and teacher, are now attracting graduate students to this or that institution. The cordial recognition of work already done, accorded to the applicant for graduate registration in our leading universities, is conducive to the development of a spirit of educational co-operation and a great gain in the establishment of a common standard of academic worth. Is it too much to think that later the perambulatory feature of student life will find conspicuous place in the undergraduate department as well, and that the common standard of academic worth can be so fully applied that graduation with the first degree in arts under the seal of any collegiate institution will everywhere be considered as representing a uniform degree of attainment, since in each case the student has sought out the place where facilities for the work he wished to do are of recognized excellence and his labors have been rewarded by the approval of a master of scholarship. In this scheme the small college will realize its mission definitely and clearly by centering and perfecting its scholastic endeavor on a few subjects, leaving to others the cultivation of the larger and wider *fields*.

Since 1870 another marked movement has made itself manifest in our collegiate life. *The tendency to shorten or abridge* the college course has been no sudden process. From the time of Hamilton we have seen the impatience of American youth over the delay of their own coming to maturity and their earnest desire to get into life and make for themselves fame and fortune. Ill considered as much of this ambition has been, the reasonableness of the requests presented by individual petitioners to college boards of government has stimulated inquiry as to the justice of the demand. The discussion produced has resulted in a careful analysis of the position of the college in our scheme of education and a firm endorsement of its serviceableness to the future professional man or to the man of affairs. Yet while the span of life in modern days may have been lengthened by a more thorough understanding of nature's laws, the years in which the greatest benefit can accrue to a student from a college course have not been enlarged, and the time at which a youth should enter upon his active career to his best advantage has not altered. In the face of this problem four solutions have presented themselves to the American college.

The first of these has been to reduce the required course to three years, or even to two years.

The second, to introduce into the studies of the fourth year subjects directly preparatory to the professions.

The third to hold a four-term session.

The fourth to require the completion of only a certain number of subjects for eligibility to the first degree in arts—the time in which these are completed being left to the student's choice.

It is needless to say that the wholesale adoption of these ideas would bring with it an extraordinary change in the organization and government of our colleges. The "class system" would to a large extent disappear, and we would no longer meet in educational discussion that mysterious individual "The Average Student." It will be the individual and not the average student who will hereafter be con-

sidered, and the question of granting or withholding a collegiate degree will turn on individual attainment rather than on average ability. The change will, to this extent, work in the direction of sound learning. But coupled with it there is also the manifest danger of encouraging that truly American intellectual vice, superficiality. The placing of a premium on the number of credits and the offer of the colleges to grant degrees on the completion of a given number of courses tends to discount scholarship and thorough training. Facts may be crammed, books may be analyzed, problems solved, the record may be complete, so far as formal requirement is concerned; but, like many another American patent, the result is machine-made and is only intended to sell.

The commercial value of the college degree is another feature of our later nineteenth century education, that has become conspicuous. As the condition for entrance upon the professional course the degree has received a definite valuation in scholarly terms, and as a requirement for admission to teaching in the higher grades it has had placed upon it a market price in dollars and cents. Anything that contributes to securing definiteness of aim in human activity is of unquestioned utility. It directs the energy and economizes effort. But to look upon the college merely as a trade school, or to consider it wholly as a preparation for a single sphere of subsequent activity, is to degrade its function and distort its purpose. In the college course much can be learned which will be directly serviceable in the minutiae of the future profession. Much can be taught with the conscious notion of giving what will be directly helpful and inspiring in future years. But the main purpose of the college curriculum is not to develop, incubator fashion, so many embryo doctors, ministers, lawyers or teachers, but to train men and women for citizenship in the largest and freest manner possible. The college curriculum is broad, systematically developed, and instinct with the life of the American people. It finds place for the classics, and also for the modern literatures; for mathematics and the sciences, and also for history, for economics, and for the accurate and *thorough* acquaintance with the English language.

In nothing has there been a more marked change in method than *in the manner of teaching the English language*. From a despised subordinate it has risen to a position of prominence and importance. It has been divided into its departments of language, literature, and rhetoric, has cut loose from its adhesion to historical text-books and collections of elegant extracts, and has turned to the authors themselves and the intensive study of periods of literary thought. In language, the latest resources of modern philological research have been brought to its aid, and progressive differences in meanings and use of words have been carefully illustrated. The structure of the language and its relations to the great Aryan family have been clearly set forth, and the peculiarities of the vocabularies of the masters of its literature have been explained and analyzed.

The literature itself has been subjected to discriminating distinctions, and the position of each author in the work of his time and the rise of the successive schools of literary expression and their influence have been intensively studied. The aim has become active to put the students in cordial sympathy with the literary history of the English race, and to develop before them the evolution of its thought and expression. Broad, analytic and thorough, the English teaching, in language and in literature, of our colleges has demonstrated its claim to consideration and has proved its value to high regard.

In the department of rhetoric a greater revolution has taken place. The formal work of the text book of principles has departed and in its place has been instituted an entirely different exercise. The memorizing of laws and rules has been clearly shown to be no part of teaching good writing and, in the study of rhetoric, the chief emphasis is laid on the continued daily practice of the art by the student under intelligent criticism. Previous to 1885 this was almost entirely an unknown and untried method. Its success has demonstrated its usefulness. It is an adaptation of the laboratory method to the needs of a new subject, as we have seen it appropriated by literature, in its manipulation of the works of the authors,

and, by language, in its examination of expression and vocabularies.

Interesting, as a special feature of the rhetoric work, has been the general resuscitation throughout the country of the courses in Forensics, venerable from their antiquity. Though wellnigh moribund in the period of the mid-century, these courses lately have developed by the popular assistance of the intercollegiate debate into an established feature of the modern curriculum.

In history, economics and the allied subjects of social and political science and of international law the modern curriculum is notably strong and effective. In these we see the same tendency toward differentiation which is manifest in the language work of whatever sort, an intensification of attention on special periods and an elaborate examination of the causes of the great events in human progress, supplemented by lectures and critical reports. The present era has witnessed here the decline of the use of the text-book and memoriter work and has seen the stress laid on the correlation of facts. History, economics, social science and international law, though allied from their nature, are no longer hampered by their mutual interferences. They have grown into independent departments with their materials organized, systematized and clearly defined as special and important fields of scholastic culture. It is *natural* that the curriculum in the United States should *develop* along these lines of English, History, Economics, Social Science, Political Science and International Law because the problems herein contained vitally concur with the welfare of the people. Questions directly related to these subjects continually press for a solution and complicated conditions of national administration have their proper relief only in the knowledge that comes from a study of the fundamental principles on which these subjects are based. In so far as they, and other subjects, are organized and the body of truth contained in them is segregated into a system with principles helpful to the welfare of humanity, thus far should any subject be admitted into the curri-

culum of the college in the United States. This test, applied, has enriched our curriculum with the biological sciences, and the new psychology. It has placed physics on a new foundation and has given a broader field for the work in chemistry. Astronomy, the classics, the modern literatures have all felt the impulse. The work in Education as a science, the latest applicant, has proved its suitableness for enrollment.

The *evolution of the subject-matter* of the curriculum is still an open question. It seems reasonable to allow that the subject once admitted should be received on an equality. The tendency in the college to-day is to allow the justice of this view. The difficulty of weighing, by some common standard, the attainment made by students in the different lines when discipline was the criterion led to the multiplication of differing degrees. But so soon as it was seen that development and power for service were the true indices for judgment, the futility of this elaborate nomenclature became apparent. It is evident now, with the enlargement of view, the unity of aim, and the cordial co-operation seen in the college world, that we shall soon be relieved of the accumulation of miscellaneous decorations to characterize the graduates of the American college and, in the place of an assortment of letters of varying worth, the single degree will hereafter be granted to all graduates of good and regular standing—a degree that will stand everywhere for character, ability and attainment, more particularly testifying that its recipient has completed a course of preparatory study, and has passed examinations on the same before an examining board authorized by the college; that he has sustained himself with credit in liberal pursuits, either intensively or extensively, and has learned to manage his mental, moral, and physical nature in a way to advantage society and make for his own and others' happiness; that he is fully prepared actively to participate in the present purpose of the culture of the social consciousness—the true end and aim of all formal education.

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